

Title (en)

Fuel pressurizing plunger assembly for a compression ignition engine

Title (de)

Kraftstoffdruckerzeugende Kolbenanordnung für eine druckgezündete Brennkraftmaschine

Title (fr)

Arrangement de piston mettant du combustible sous pression pour un moteur à allumage par compression

Publication

EP 0683314 B1 19991215 (EN)

Application

EP 95107461 A 19950517

Priority

US 24558994 A 19940518

Abstract (en)

[origin: EP0683314A1] A wear and scuff-resistant timing plunger (12) for a timing assembly in a unit fuel injector (10) for an internal combustion engine is provided. The timing plunger (12) is formed of a high thermal expansion ceramic with a thermal expansion coefficient greater than 6×10^{-6} / DEG C and a hardness greater than 800 Kg/mm², which maintains a desired diametral clearance and efficient plunger function without scuffing or sticking under the axial, tangential and pressure loads encountered in the fuel injector operating environment. Preferred high thermal expansion ceramics are zirconia, alumina-zirconia and alumina. <IMAGE>

IPC 1-7

F02M 59/44; **F02M 57/02**

IPC 8 full level

F02M 57/02 (2006.01); **F02M 59/44** (2006.01)

CPC (source: EP)

F02M 57/023 (2013.01); **F02M 57/024** (2013.01); **F02M 59/445** (2013.01)

Citation (examination)

EP 0677656 A1 19951018 - CUMMINS ENGINE CO INC [US]

Cited by

EP1715176A1; CN104895722A; EP1247975A1; GB2334077A; US6149073A; GB2334077B; US6688536B2

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