

Title (en)

Fuel injection pump

Title (de)

Kraftstoffeinspritzpumpe

Title (fr)

Pompe d'injection de combustible

Publication

EP 0597250 B1 19970115 (DE)

Application

EP 93116229 A 19931007

Priority

DE 4237471 A 19921106

Abstract (en)

[origin: JPH06200852A] PURPOSE: To well transmit an adjustment force without making influences on wall thickness of a cam ring by integrally combining the cam ring for adjusting fuel injection start timing of a pump piston with a combining element for combining with an adjustment device. CONSTITUTION: A pump piston 3 is driven to an exhaust stroke and fuel injection start timing is changed in an earlier or a delayed time in response to rotary position of a cam ring 8 that is reciprocatingly moved in order to adjust start timing of an exhaust stroke of the pump piston. In order to rotate the cam ring 8, one connecting element 12 is arranged in outer circumference of the ring, and the connecting element 12 is constituted as a roller formed integrally in cylindrical outer face of the cam ring 8. In order to surely support the roller-shaped connecting element 12 in an adjusting member 16, a support portion 24 is inserted in a recess 14, and the connecting element 12 can slightly move in recess 25 formed in the support portion 14. Therefore, the adjustment force can well be transmitted from the adjusting member 16 to the cam ring 8.

IPC 1-7

F02M 41/14; **F02M 41/12**

IPC 8 full level

F02M 41/12 (2006.01); **F02M 41/14** (2006.01)

CPC (source: EP US)

F02M 41/128 (2013.01 - EP US); **F02M 41/1416** (2013.01 - EP US)

Cited by

EP0831229A1; GB2291136A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 4237471 A1 19940511; DE 59305139 D1 19970227; EP 0597250 A1 19940518; EP 0597250 B1 19970115; JP H06200852 A 19940719; US 5406923 A 19950418

DOCDB simple family (application)

DE 4237471 A 19921106; DE 59305139 T 19931007; EP 93116229 A 19931007; JP 27527193 A 19931104; US 12702893 A 19930924