

Title (en)

FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES

Publication

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Application

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Priority

DE 3920459 A 19890622

Abstract (en)

[origin: WO9015925A1] A fuel injection pump for internal combustion engines comprises a plunger and distributor piston (21) to which a rotary and a vertical movement is imparted by means of an eccentric disk (12). The eccentric disk (12) is coupled, in the direction of rotation, with a drive shaft (11) and runs, together with its front cams (14), on rollers (16) guided in an essentially stationary roller ring (17). The rotational speed and the angular position of the drive shaft (11) are ascertained by means of an angular position sensor (34). The angular position sensor (34) comprises a detector (37) which is secured to the drive shaft (11) so as to remain fixed during rotation and which scans the sensor wheel (36). The roller ring (17) is mounted on the drive shaft (11) by means of a ball bearing (41) so that uncontrolled relative movements between the detector (37) and the sensor wheel (36) are eliminated and the angular position and the rotational speed of the drive shaft (11) can be determined with high precision.

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