

Title (en)

FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES.

Title (de)

KRAFTSTOFFEINSPRITZPUMPE FÜR BRENNKRAFTMASCHINEN.

Title (fr)

POMPE A INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9012957A1] To ensure a very rapid increase in pressure inside a fuel injection pump for internal combustion engines, a pressure-control valve which controls this pressure is modified so that it is closed from the beginning when the internal combustion engine is started from the cold. To this end, the rear face of a control piston (17) of the pressure control valve (16) is acted on by a restoring spring (22) whose other point of support is an adjustable limit stop (23) which is acted on by the increasing pressure in the fuel injection pump, thereby preloading the restoring spring (22). This causes an outlet choke (46) controlled by the control piston (17) to close, so that all the fuel delivered by a feed pump (10) remains inside the pump chamber and contributes to the increase in pressure. This pressure results in very rapid adjustment of an injection adjustment piston (4), ensuring an early start of fuel injection which facilitates cold start and warm up.

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