

Title (en)
INJECTION DEVICE FOR A DIESEL ENGINE

Publication
EP 0284601 B1 19920513 (DE)

Application
EP 88890075 A 19880324

Priority
AT 74687 A 19870326

Abstract (en)
[origin: EP0284601A2] In an injection device for diesel engines, in particular in a pump nozzle (1, 41), in which the fuel is conveyed by a pilot pump (32) into an intake chamber (13, 51) which can be connected to the working chamber (9) of the injection pump piston (3) by way of at least one control hole (8) in the pump piston sleeve (7), the conveying end (i) of the injection pump piston 3 being determined by controlling the fuel through the control hole (8) or control holes into the intake chamber (13, 51), at least one displacement piston (17, 46) carried in a cylinder (21, 47) and driven to produce a reciprocating motion is provided, whose working chamber (23, 49) is always openly connected to the intake chamber (13), the displacement piston (17, 46) reducing its working chamber (23, 49) before the start of pumping (h) by the injection pump piston (3) and enlarging it on or after the completion of pumping (i) by the injection pump piston (3). In this way the fuel pressure in the intake chamber (13) is raised before the start of pumping (h) by the injection pump piston (3) and improves the filling of the working chamber (9) of the latter. When, on completion of pumping (i), the fuel emerges from the working chamber (9) of the injection pump piston (3) through the control holes (8) with great energy into the intake chamber (13, 51), the admission volume of the intake chamber is increased due to the increase in the working chamber (23, 49) of the displacement piston (17, 46), thereby reducing the force of the resulting pressure spray. <IMAGE>

IPC 1-7
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IPC 8 full level
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