

Title (en)

A FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES, IN PARTICULAR BIG, SLOW MARINE DIESEL ENGINES

Title (de)

BRENNSTOFFEINSPRITZPUMPE FÜR VERBRENNUNGSMOTOREN, INSBESONDERE LANGSAMLAEUFENDE GROSSDIESELMOTOREN FÜR DIE SCHIFFFAHRT

Title (fr)

POMPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE, EN PARTICULIER DE GROS MOTEURS DIESEL LENTS FONCTIONNANT EN MILIEU MARIN

Publication

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Application

EP 98916865 A 19980408

Priority

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- DK 44397 A 19970421

Abstract (en)

[origin: WO9848166A1] A fuel injection pump for internal combustion engines, in particular big, slow marine diesel engines, for supply of a variable amount of fuel to an injection nozzle positioned in the working cylinder of the engine, said injection nozzle having a spring-loaded needle in the nozzle aperture, and which pump comprises a barrel (2), in which a plunger (3) with an upper edge (4) formed between the end surface and the side surface of the plunger and at least one helically extending oblique cut-off edge (6), is movable, which oblique cut-off edge (6) defines a recess (5) in the side surface of the plunger, which recess is connected through an axial duct (9) with the end surface of the plunger, and in which the wall of the barrel (2) has at least one cut-off hole (11), which opens into a surrounding supply chamber containing the fuel under moderate pressure, said at least one hole at the travel of the plunger from the bottom to the top position being covered by the side surface of the plunger below the upper edge and being later uncovered by the oblique cut-off edge for diversion of excess fuel at the end of the effective pump stroke. To overcome problems due to erosion and pressure oscillation in pumps of big dimensions, the pumps are designed such that at least one of the cut-off holes (11) contains a flow limiting means (13) placed at a distance from the wall of the barrel, said means defining a chamber (20) positioned between the cylindrical wall of the barrel (2) and the flow-limiting means.

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