Title (en)

INJECTION DEVICE FOR SELF-IGNITION INTERNAL COMBUSTION ENGINES

Publication

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Application

EP 90119503 A 19901011

Priority

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Abstract (en)

[origin: US5054445A] The invention relates to a fuel injection system for self-ignition internal combustion engines. The noise reduction of Diesel engines requires new injection systems. According to the invention a pre-injection and a main injection is achieved by employing to injection lines of different lengths. The difference in length is selected such that the time difference of the pressure waves for travelling the respective lengths corresponds to the desired time delay between the pre-injection and the main injection. In order to account for the compressibility of the fuel both injection lines are maintained at a standing pressure. The hydraulic effect of the injection lines on each other is prevented by check valves and by-pass valves. The controlled injection significantly reduces the combustion noise.

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IPC 8 full level

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