

Title (en)

Injection device for a fuel-gas mixture.

Title (de)

Vorrichtung zur Einspritzung eines Brennstoff-Gas-Gemisches.

Title (fr)

Dispositif d'injection d'un mélange de gaz et de carburant.

Publication

EP 0484681 B1 19940302 (DE)

Application

EP 91117093 A 19911008

Priority

DE 4035312 A 19901107

Abstract (en)

[origin: EP0484681A1] In the case of known devices for the injection of a fuel-gas mixture with a fuel injection valve projecting into a stepped longitudinal bore of a gas enclosing section, the formation of an extremely homogeneous fuel-gas mixture and the fine atomisation of the fuel is not guaranteed if the gas encloses the sprayed fuel approximately in its direction of flow. <??>In the longitudinal opening (9) of the gas enclosing section (11) the novel device has a swirling element (55) with a mixing aperture (57) running concentrically to the valve longitudinal axis (4), into which aperture at least one curved, groove-shaped flow duct (82) formed in the wall of the swirling element (55) opens. In this way an especially fine atomisation of the fuel and the formation of an extremely homogeneous fuel-gas mixture is ensured. <??>The design of the device is particularly suitable for use on mixture-compressing spark ignition internal combustion engines. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

F02M 67/00 (2013.01 - EP US); **F02M 69/047** (2013.01 - EP US); **F02M 69/08** (2013.01 - EP US); **F02M 69/50** (2013.01 - EP US)

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Cited by

EP0681104A1; US5890477A; US2012241032A1; US9082807B2; WO9612886A1; WO9701706A3; WO9317237A1; WO9309344A1

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