

Title (en)

DEVICE FOR INJECTING FUEL INTO A SECONDARY FLOW OF COMBUSTION AIR IN A COMBUSTION CHAMBER

Publication

EP 0148837 B1 19880323 (DE)

Application

EP 84900267 A 19831220

Priority

DE 3315241 A 19830427

Abstract (en)

[origin: WO8404359A1] Device for injecting fuel into the combustion chamber of an internal combustion engine, with an injector and a separation wall (12, 23, 29) arranged thereafter, provided with passage openings (13) for the injection jets and configured as a guiding device for a partial flow of combustion air, which is accelerated by the injection action of the fuel jets into the passage openings (13). On the separation wall (12, 23, 29) there is further provided a device (26, 24, 32) for preheating the partial flow of combustion air. In the present device, the partial flow of combustion air circulates almost continuously through the separation wall (12, 23, 29) configured as a guiding device, the acceleration caused by the injection action of the fuel jets increasing as the rotation speed of the internal combustion engine increases. The advantage is that in the whole range of rotation speeds of the internal combustion engine, it is possible to obtain a proper and steady combustion as well as to reduce emissions of noxious substances.

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