

Title (en)

INJECTION VALVE, IN PARTICULAR FOR DIRECTLY INJECTING FUEL INTO THE COMBUSTION CHAMBER OF AN INTERNAL COMBUSTION ENGINE

Title (de)

EINSPIRZVENTIL, INSBESONDERE ZUM DIREKTEN EINSPIRZEN VON KRAFTSTOFF IN EINEN BRENNRAUM EINES VERBRENNUNGSMOTORS

Title (fr)

SOUPAPE D'INJECTION, UTILE NOTAMMENT POUR INJECTER DIRECTEMENT DU CARBURANT DANS LA CHAMBRE DE COMBUSTION D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 0846225 A1 19980610 (DE)

Application

EP 96946077 A 19961217

Priority

- DE 9602397 W 19961217
- DE 19625059 A 19960622

Abstract (en)

[origin: DE19625059A1] An injection valve, in particular for directly injecting fuel into the combustion chamber of an internal combustion engine, has a fuel flow path from a fuel inlet to an injection outlet (41). A plurality of fuel pipes (34) are arranged in the fuel flow path upstream of the injection outlet. The cross section of the fuel pipes determines the amount of fuel injected by unit of time at a given fuel pressure. In order to influence fuel distribution in an injected fuel cloud, in particular to intentionally divide the fuel cloud into fuel strands, at least part of the fuel pipes (34) is oriented in such a way that the fuel jets leaving the fuel pipes are directly injected through the injection outlet (41) when the injection valve is open.

IPC 1-7

F02M 61/18; F02M 51/06

IPC 8 full level

F02M 51/06 (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)

F02M 51/0671 (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/18** (2013.01 - EP US); **F02M 61/1806** (2013.01 - EP US)

Citation (search report)

See references of WO 9749911A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19625059 A1 19980102; DE 59611443 D1 20071031; EP 0846225 A1 19980610; EP 0846225 B1 20070919; JP 3974184 B2 20070912; JP H11511831 A 19991012; US 6027050 A 20000222; WO 9749911 A1 19971231

DOCDB simple family (application)

DE 19625059 A 19960622; DE 59611443 T 19961217; DE 9602397 W 19961217; EP 96946077 A 19961217; JP 50203498 A 19961217; US 1192798 A 19980217