

Title (en)

ATOMIZING DISC AND A FUEL INJECTION VALVE HAVING AN ATOMIZING DISC

Title (de)

ZERSTÄUBERSCHEIBE UND BRENNSTOFFEINSPRITZVENTIL MIT ZERSTÄUBERSCHEIBE

Title (fr)

DISQUE DIFFUSEUR ET SOUPAPE D'INJECTION DE CARBURANT EQUIPEE DE CE DERNIER

Publication

EP 1019629 A1 20000719 (DE)

Application

EP 99906059 A 19990118

Priority

- DE 9900089 W 19990118
- DE 19815795 A 19980408

Abstract (en)

[origin: DE19815795A1] The invention relates to an atomizing disc is characterized in that it is comprised of at least one metallic material, has at least one inlet opening (67) in an upper top layer (60), and has at least one outlet opening (69) in a lower base layer (62). In addition, the atomizing disc comprises at least two turbulence ducts (66) which open into a turbulence chamber (68). The turbulence chamber (68) is provided in a middle turbulence generating layer (61). Two different (bi-flux) streams flow into the turbulence chamber (68) via the inlet opening (67) and the turbulence ducts (68). All layers of the atomizing disc (30) are constructed directly on top of one another by means of electrodeposition (multilayer metallizing). The atomizing disc (30) is especially suited for use on a fuel injection valve, especially on a high-pressure injection valve for directly injecting fuel into a combustion chamber of a compound compressed, spark ignition internal combustion engine.

IPC 1-7

F02M 61/18; **F02M 51/06**; **B05B 1/34**; **C25D 1/10**; **G03F 7/00**

IPC 8 full level

B05B 1/34 (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR US)

B05B 1/3426 (2013.01 - EP US); **B05B 1/3436** (2013.01 - EP US); **B05B 1/3478** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/18** (2013.01 - KR); **F02M 61/1853** (2013.01 - EP US)

Citation (search report)

See references of WO 9953193A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19815795 A1 19991014; EP 1019629 A1 20000719; JP 2002503311 A 20020129; KR 20010012981 A 20010226; US 6161782 A 20001219; WO 9953193 A1 19991021

DOCDB simple family (application)

DE 19815795 A 19980408; DE 9900089 W 19990118; EP 99906059 A 19990118; JP 55100199 A 19990118; KR 19997010951 A 19991125; US 44551699 A 19991207