

Title (en)

PERFORATED DISK OR ATOMIZING DISK AND AN INJECTION VALVE WITH A PERFORATED DISK OR ATOMIZING DISK

Title (de)

LOCHSCHEIBE BZW. ZERSTÄUBERSCHEIBE UND EINSPRITZVENTIL MIT EINER LOCHSCHEIBE BZW. ZERSTÄUBERSCHEIBE

Title (fr)

DISQUE PERFORE OU DISQUE DE PULVERISATION ET SOUPAPE INJECTRICE DOTEE D'UN TEL DISQUE PERFORE OU DISQUE DE PULVERISATION

Publication

EP 0939858 A1 19990908 (DE)

Application

EP 98952556 A 19980910

Priority

- DE 9802674 W 19980910
- DE 19740882 A 19970916
- DE 19831845 A 19980716

Abstract (en)

[origin: US6230992B1] A perforated disk has a complete passage for a fluid and composed of an inlet opening, outlet openings, and at least one cavity positioned between them. The at least three functional plates of the perforated disk, each of which has a characteristic opening structure, are applied onto one another by electrodeposition (multilayer electroplating) so that the perforated disk is composed of a single piece. Gas supply openings through which a gas can be supplied in the direction of the fluid to be sprayed are located in the lower functional plate, thus providing very fine atomization of the fluid. The outlet openings are part of the gas supply openings. The perforated disk is especially suitable for use in injection valves for mixture-compressing internal combustion engines with externally supplied ignition.

IPC 1-7

F02M 61/18

IPC 8 full level

B05B 7/08 (2006.01); **F02M 61/18** (2006.01); **F02M 69/04** (2006.01); **F02M 51/08** (2006.01)

CPC (source: EP US)

B05B 7/0815 (2013.01 - EP US); **B05B 7/0853** (2013.01 - EP US); **B05B 7/0892** (2013.01 - EP US); **F02M 51/08** (2019.01 - EP US); **F02M 61/184** (2013.01 - EP US); **F02M 61/186** (2013.01 - EP US); **F02M 69/047** (2013.01 - EP US)

Citation (search report)

See references of WO 9914487A1

Designated contracting state (EPC)

CH DE GB IT LI

DOCDB simple family (publication)

US 6230992 B1 20010515; CZ 167799 A3 20000216; CZ 292958 B6 20040114; EP 0939858 A1 19990908; EP 0939858 B1 20040428; JP 2001505279 A 20010417; WO 9914487 A1 19990325

DOCDB simple family (application)

US 30848499 A 19990719; CZ 167799 A 19980910; DE 9802674 W 19980910; EP 98952556 A 19980910; JP 51729399 A 19980910