

Title (en)

VALVE AND METHOD FOR PRODUCING A VALVE SEAT FOR A VALVE

Title (de)

VENTIL UND VERFAHREN ZUR HERSTELLUNG EINES VENTILSITZES FÜR EIN VENTIL

Title (fr)

SOUPAPE ET PROCEDE DE REALISATION D'UN SIEGE DESTINE A UNE SOUPAPE

Publication

EP 0920359 A1 19990609 (DE)

Application

EP 98931957 A 19980421

Priority

- DE 9801103 W 19980421
- DE 19726991 A 19970625

Abstract (en)

[origin: DE19726991A1] The valve provided for in the invention is characterized in that it comprises a perforated disk (16) having at least two metallic sheet layers (20) contacting each other in a sandwich-like manner. Said perforated disk (16) comprises at least one floor area (22) having an opening geometry (23) required for injecting the medium and a seat area (24) with a valve seat surface (25) in such a way that the functions of the valve seat and the perforated disk are combined in one laminated sheet element. The invention also provides for a method for producing a valve seat for such a valve from metal sheets arranged in a sandwich-like manner. Said valve is especially suited for use in fuel injection units of spark-ignited internal combustion engines with mixture compression.

IPC 1-7

B21D 53/10; **F02M 61/16**; **F02M 61/18**; **F02M 51/06**

IPC 8 full level

B21D 24/16 (2006.01); **B21D 53/10** (2006.01); **F02M 51/06** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR US)

B21D 53/10 (2013.01 - KR); **F02M 51/0682** (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); **F02M 61/186** (2013.01 - EP US); **F02M 61/188** (2013.01 - EP US); **Y10T 29/49306** (2015.01 - EP US); **Y10T 29/49409** (2015.01 - EP US); **Y10T 29/49423** (2015.01 - EP US)

Citation (search report)

See references of WO 9900201A1

Cited by

EP3628852A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19726991 A1 19990107; AU 724749 B2 20000928; AU 8206398 A 19990119; BR 9806007 A 19990831; DE 59803184 D1 20020404; EP 0920359 A1 19990609; EP 0920359 B1 20020227; JP 2001500213 A 20010109; KR 100497268 B1 20050629; KR 20000068314 A 20001125; US 6173914 B1 20010116; WO 9900201 A1 19990107

DOCDB simple family (application)

DE 19726991 A 19970625; AU 8206398 A 19980421; BR 9806007 A 19980421; DE 59803184 T 19980421; DE 9801103 W 19980421; EP 98931957 A 19980421; JP 50519499 A 19980421; KR 19997001471 A 19990224; US 24286499 A 19990224