

Title (en)

METHOD FOR PRODUCING AND FIXING A PERFORATED DISK

Title (de)

VERFAHREN ZUR HERSTELLUNG UND BEFESTIGUNG EINER LOCHSCHEIBE

Title (fr)

PROCEDE POUR PRODUIRE ET FIXER UN DISQUE PERFORE

Publication

**EP 1613857 B1 20081015 (DE)**

Application

**EP 04707869 A 20040204**

Priority

- DE 2004000178 W 20040204
- DE 10314670 A 20030401

Abstract (en)

[origin: WO2004088124A1] The invention relates to a method for producing and fixing a perforated disk (20) for a fuel injection valve. Said method is characterised by the following steps: a) a flat metal plate (20') having a constant thickness is provided, b) the thickness is reduced in a region (33) of the metal plate (20') by stamping or punching, c) at least one spray opening (34) is created in the region (33) of the reduced thickness, d) the metal plate (20') is machined until a perforated disk (20) with pre-determined outer dimensions is obtained, and e) the perforated disk (20) is fixed to a valve seat body (16) of the fuel injection valve in such a way that said fuel injection valve projects past an admission region (40) of the perforated disk (20) with a lower front side (17) thereof - said admission region created by reducing the thickness of the metal plate - such that the at least one spray opening (34) is covered.

IPC 8 full level

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

CPC (source: EP US)

**F02M 51/0682** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/166** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US);  
**F02M 61/1853** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**DE 10314670 A1 20041014**; CN 100523478 C 20090805; CN 1771391 A 20060510; DE 502004008268 D1 20081127;  
EP 1613857 A1 20060111; EP 1613857 B1 20081015; JP 2006522253 A 20060928; JP 4510804 B2 20100728; US 2007007366 A1 20070111;  
WO 2004088124 A1 20041014

DOCDB simple family (application)

**DE 10314670 A 20030401**; CN 200480009323 A 20040204; DE 2004000178 W 20040204; DE 502004008268 T 20040204;  
EP 04707869 A 20040204; JP 2006504228 A 20040204; US 55228106 A 20060712