

Title (en)  
Injection nozzle for injecting a fluid

Title (de)  
Einspritzdüse zum Einspritzen eines Fluides

Title (fr)  
Buse d'injection pour injecter un fluide

Publication  
**EP 1548273 A1 20050629 (DE)**

Application  
**EP 04106720 A 20041220**

Priority  
DE 10361576 A 20031223

Abstract (en)  
The injection nozzle for the injecting of a fluid has a nozzle body (2) and at least one passage (3) embedded in the nozzle body. The nozzle passage is constructed as a ceramic hollow fiber. The inner wall (4) of the ceramic hollow fiber has a coating to reduce the flow resistance. The coating consists of metal oxide or ceramics produced through metal organic salts. The outlet opening of the hollow fiber lies with the end face of the nozzle body in an exit plane (5). An independent claim is included for a use for the injection nozzle which may be for the injecting of fuel into the cylinder of an internal combustion engine, or to apply solder onto a printed circuit board.

Abstract (de)  
Eine Einspritzdüse zum Einspritzen eines Fluids umfasst einen Düsenkörper und mindestens einen in den Düsenkörper eingebetteten Düsenkanal, welcher als keramische Hohlaser ausgebildet ist. <IMAGE>

IPC 1-7  
**F02M 61/18**

IPC 8 full level  
**B05B 1/00** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)  
**F02M 61/166** (2013.01); **F02M 61/1806** (2013.01)

Citation (search report)  
• [X] EP 1138936 A2 20011004 - SIEMENS AUTOMOTIVE CORP LP [US]  
• [A] DE 10044764 A1 20020404 - EWM HIGHTEC WELDING GMBH [DE]  
• [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 343 (M - 1285) 24 July 1992 (1992-07-24)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 299 (M - 1274) 2 July 1992 (1992-07-02)

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