

Title (en)

Injection device for fuel injection

Title (de)

Einspritzvorrichtung zum Einspritzen von Kraftstoff

Title (fr)

Dispositif d'injection pour l'injection de carburant

Publication

EP 1408231 B1 20061213 (DE)

Application

EP 03103635 A 20031001

Priority

DE 10246693 A 20021007

Abstract (en)

[origin: EP1408231A1] A fuel injection device for a combustion engine, especially a common rail system, comprises a jet needle (2) in a body (1) having a micro blind hole (10) holding the needle point (3) and spray holes (8). The needle point is at the height of the holes and has recesses to ensure a minimum separation between the point and the holes.

IPC 8 full level

F02M 61/18 (2006.01)

CPC (source: EP US)

F02M 61/1873 (2013.01 - EP US)

Cited by

DE102010032050B4; GB2552673A; GB2552673B

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1408231 A1 20040414; EP 1408231 B1 20061213; DE 10246693 A1 20040415; DE 50305940 D1 20070125; JP 2004132376 A 20040430; US 2004112988 A1 20040617; US 7017840 B2 20060328

DOCDB simple family (application)

EP 03103635 A 20031001; DE 10246693 A 20021007; DE 50305940 T 20031001; JP 2003348497 A 20031007; US 68032303 A 20031007