

Title (en)

A method of minimizing deposits in a fuel injector

Title (de)

Verfahren für die Reduzierung von Ablagerungen in einem Kraftstoffinjektor

Title (fr)

Procédé pour minimaliser les dépôts dans un injecteur de combustible

Publication

EP 1505342 A1 20050209 (EN)

Application

EP 04017821 A 20040728

Priority

GB 0318164 A 20030804

Abstract (en)

A fuel injector comprises a fuel flow passage about a central axis (2) of the fuel injector, the passage including a valve seat (3) inclined at a first angle to the central axis; and a needle orifice (6); wherein the passage further comprises a first volume between the valve seat and the needle orifice; and a first edge (9) between the valve seat and the first volume; wherein the first volume is chosen such that fuel flow remains substantially laminar as it passes over the first edge; the passage further comprising an annulus (10) at the base of the first volume, radially outwardly of the needle orifice, and a second edge (11) between the annulus and the needle orifice; wherein fluid passing over the second edge is caused to cavitate, such that deposits in the needle orifice are substantially removed. <IMAGE>

IPC 1-7

F23D 11/38; F02M 51/06; F02M 61/18

IPC 8 full level

F02M 61/18 (2006.01); **F23D 11/38** (2006.01)

CPC (source: EP)

F02M 61/18 (2013.01); **F02M 61/1806** (2013.01); **F02M 61/1833** (2013.01); **F02M 61/188** (2013.01); **F23D 11/386** (2013.01); **F23D 2900/00016** (2013.01); **F23D 2900/31018** (2021.05); **F23N 2235/28** (2020.01)

Citation (applicant)

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Citation (search report)

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Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1505342 A1 20050209; **EP 1505342 B1 20120307**; GB 0318164 D0 20030903; GB 2404693 A 20050209; GB 2404693 B 20050622

DOCDB simple family (application)

EP 04017821 A 20040728; GB 0318164 A 20030804