

Title (en)

Fuel injection system

Title (de)

Kraftstoff-Einspritzsystem

Title (fr)

Système d'injection de carburant

Publication

**EP 1752651 A1 20070214 (DE)**

Application

**EP 05017332 A 20050809**

Priority

EP 05017332 A 20050809

Abstract (en)

Fuel injection system comprises a piezoelectric injection valve, a fuel pump arranged in a fuel line upstream of the valve and a molecule separator arranged in the fuel line upstream of the pump and between the pump and fuel tank. The separator reduces the amount of polar components of the fuel, especially of non-dissolved water and/or alcohol molecules, to non-polar molecules before feeding the fuel into the pump. Preferred Features: The molecule separator reduces the polar components of the fuel to less than 20 ppm. A sensor arranged between the separator and pump measures the amount of polar components downstream of the separator.

IPC 8 full level

**F02M 37/22** (2006.01); **F02M 47/02** (2006.01)

CPC (source: EP US)

**F02M 37/24** (2018.12 - EP US); **F02M 37/36** (2018.12 - EP US); **F02M 47/027** (2013.01 - EP US)

Citation (search report)

- [X] US 5149433 A 19920922 - LIEN LARRY A [US]
- [X] EP 0311162 A2 19890412 - SEPARATION DYNAMICS INC [US]
- [A] DE 10158547 A1 20020606 - DENSO CORP [JP]
- [A] US 2004004039 A1 20040108 - WARNER TIMOTHY NEAL [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1752651 A1 20070214**

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