

Title (en)
Fuel injection system

Title (de)
Kraftstoff-Einspritzsystem

Title (fr)
Système d'injection de carburant

Publication
EP 1752652 A1 20070214 (DE)

Application
EP 06014945 A 20060718

Priority
• EP 05017332 A 20050809
• EP 06014945 A 20060718

Abstract (en)
The system has an injection valve (10) and a high pressure pump (24) arranged upstream of the valve in a fuel pipe (12). A molecule separator (16) is arranged between the pump and a fuel tank (14). The separator selectively reduces an amount of polar components of the fuel such as molecule portion of undissolved water and/or molecule portion of alcohol to a non-polar component of the fuel, before feeding the fuel into the pump. A sensor (18) is arranged upstream of the separator to measure the amount of the polar components of the fuel, where the sensor includes two different measuring units.

IPC 8 full level
F02M 37/22 (2006.01); **F02M 37/26** (2019.01); **F02M 47/02** (2006.01); **F02M 37/36** (2019.01)

CPC (source: EP US)
F02D 33/003 (2013.01 - EP US); **F02M 37/26** (2018.12 - EP US); **F02M 47/027** (2013.01 - EP); **F02M 37/36** (2018.12 - EP US); **F02M 63/0026** (2013.01 - EP)

Citation (applicant)
• US 5149433 A 19920922 - LIEN LARRY A [US]
• EP 0311162 A2 19890412 - SEPARATION DYNAMICS INC [US]

Citation (search report)
• [A] US 5149433 A 19920922 - LIEN LARRY A [US]
• [A] 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)
WO 2007017276 A1 20070215; EP 1752652 A1 20070214; JP 2009504963 A 20090205

DOCDB simple family (application)
EP 2006007898 W 20060809; EP 06014945 A 20060718; JP 2008525481 A 20060809