

Title (en)

Fuel injection system including a purging system for purging an injection nozzle in operation with pyrolysis fuel oil

Title (de)

Kraftstoffeinspritzsystem mit einem Spülsystem zum Spülen einer Einspritzdüse in Betrieb mit Pyrolyseheizöl

Title (fr)

Système d'injection de combustible incluant un système de purge pour purger une buse d'injection fonctionnant avec une huile combustible de pyrolyse

Publication

EP 2508745 B1 20140305 (EN)

Application

EP 11161075 A 20110404

Priority

EP 11161075 A 20110404

Abstract (en)

[origin: EP2508745A1] The present disclosure refers to a fuel injection system (100) configured to supply fuel as, e.g., Pyrolysis Fuel Oil to injection nozzles (105) of a large internal combustion engine (5). The fuel injection system may comprise a fuel injection pump (110) configured to measure fuel as, e.g., Pyrolysis Fuel Oil into correct amounts for injection, building up a high pressure, and delivering it to at least one injection nozzle (105) of the large internal combustion engine (5) at the proper time. The fuel injection pump (110) may include a pump barrel (10) extending along a longitudinal direction and having a barrel inner wall (12), a plunger (13) configured to reciprocate within the pump barrel (10) and guided by the barrel inner wall (12), and a first groove (38) formed in the barrel inner wall (12) at a first position with respect to the longitudinal direction and always covered by the reciprocating plunger (13). The fuel injection system may further comprise an injection nozzle (105) including an injection barrel (200) and a valve needle (210) configured to reciprocate within the injection barrel and guided by a barrel inner wall (212). A barrel groove (232) may be formed in the barrel inner wall at a position that is always covered by the valve needle (210). A purging system (125) may be provided to supply a purging fluid to the first groove (38) of the fuel pump (110) and the barrel groove (232) of the injection nozzle (105).

IPC 8 full level

F02M 63/00 (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)

F02M 61/16 (2013.01); **F02M 63/0001** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2508745 A1 20121010; **EP 2508745 B1 20140305**; WO 2012136342 A1 20121011

DOCDB simple family (application)

EP 11161075 A 20110404; EP 2012001445 W 20120330