

Title (en)

A fuel injector for internal combustion engines

Title (de)

Kraftstoffeinspritzventil für Verbrennungsmotoren

Title (fr)

Injecteur de carburant pour moteurs à combustion interne

Publication

EP 2239451 B1 20110907 (EN)

Application

EP 09156590 A 20090330

Priority

EP 09156590 A 20090330

Abstract (en)

[origin: EP2239451A1] A fuel injector for internal combustion engines, comprising: - a housing (16), - a valve guide (38) fixed at a lower end of said housing (16), the valve guide (38) having a longitudinal guide bore (44) and a chamber (46) provided with a valve seat (50), said chamber (46) being connected to a fuel supply duct (22,48); - an atomizer (56) fixed at a lower end of said valve guide (38), the atomizer (56) having a longitudinal bore (80) in flow connection with said chamber (46), the atomizer having a plurality of nozzle bores (82) having inlet openings (84) facing into said longitudinal bore (80); - a spindle (88) having a valve portion (92) cooperating with said valve seat (50), and a cut-off element (94) extending into said longitudinal bore (80) of the atomizer (56), wherein an upper cut-off section (102) and a lower cut-off section (106) axially spaced apart from each other are defined between the outer surface of the cut-off element (94) and the inner surface of the longitudinal bore (80), cut-off sections (102,106) being both closed in the closed position of the spindle (88), the cut-off element (94) having a central duct (112) in flow connection with the longitudinal bore (80) of the atomizer (56) both above the upper cut-off section (102) and below the lower cut-off section (106).

IPC 8 full level

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CPC (source: EP KR)

F02M 61/042 (2013.01 - EP KR); **F02M 61/06** (2013.01 - EP KR); **F02M 61/10** (2013.01 - KR); **F02M 61/182** (2013.01 - EP KR); **F02M 61/1866** (2013.01 - KR); **F02M 61/1893** (2013.01 - EP KR)

Cited by

EP2428672A3; DE102013001098B3; EP2503138A1; DK179281B1; DK201670986A1; EP3336342A1; CN108224476A; RU2677436C1

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