

Title (en)

Valve assembly for an injection valve and injection valve

Title (de)

Ventilanordnung für ein Einspritzventil und Einspritzventil

Title (fr)

Ensemble de soupape pour soupape d'injection et soupape d'injection

Publication

EP 2439400 A1 20120411 (EN)

Application

EP 10186580 A 20101005

Priority

EP 10186580 A 20101005

Abstract (en)

Valve assembly (60) of an injection valve (62), the valve assembly (60) comprising a valve body (4) including a central longitudinal axis (L), the valve body (4) comprising a cavity (8) with a fluid inlet portion (42), a fluid outlet portion (44) and a needle seat (46), a valve needle (10) axially movable in the cavity (8), the valve needle (10) comprising a seat part (50) with a sealing layer (52) forming a surface of the seat part (50), the valve needle (10) preventing a fluid flow through the fluid outlet portion (44) in a closing position in which the sealing layer (52) rests on the needle seat (46) and releasing the fluid flow through the fluid outlet portion (44) in further positions, the needle seat (46) consisting of a first material and the sealing layer (52) consisting of a second material being a metal, and the hardness of the first material being greater than the hardness of the second material.

IPC 8 full level

F02M 61/10 (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)

F02M 51/0671 (2013.01); **F02M 61/10** (2013.01); **F02M 61/166** (2013.01); **F02M 61/188** (2013.01); **F02M 61/1886** (2013.01); **F02M 61/1893** (2013.01)

Citation (search report)

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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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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