

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 2216542 A1 20100811 (EN)

Application
EP 09001675 A 20090206

Priority
EP 09001675 A 20090206

Abstract (en)
Valve assembly (14) for an injection valve (22), comprising a valve body (20) including a central longitudinal axis (A), the valve body (20) comprising a cavity (24) with a fluid inlet portion (26) and a fluid outlet portion (28), a valve needle (22) axially movable in the cavity (24), the valve needle (22) preventing a fluid flow through the fluid outlet portion (28) in a closing position and releasing the fluid flow through the fluid outlet portion (28) in further positions, the valve needle (22) having a guide portion (46) being designed to guide the valve needle (22) in the valve body. A ring element (50) is arranged coaxially between the valve body (20) and the valve needle (22) at an axial end (48) of the needle guide portion (46) facing away from the fluid outlet portion (28). The ring element is fixedly coupled to the valve needle (22). The ring element (50) is designed to cause a given pressure drop for a fluid flow through the fluid outlet portion (28).

IPC 8 full level
F02M 61/12 (2006.01)

CPC (source: EP)
F02M 61/12 (2013.01)

Citation (search report)
• [X] DE 102007032741 A1 20090115 - BOSCH GMBH ROBERT [DE]
• [X] WO 0248536 A1 20020620 - BOSCH GMBH ROBERT [DE], et al
• [X] DE 10348928 A1 20050512 - BOSCH GMBH ROBERT [DE]
• [X] WO 2009017581 A1 20090205 - CATERPILLAR INC [US], et al

Cited by
WO2011012355A1

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2216542 A1 20100811

DOCDB simple family (application)
EP 09001675 A 20090206