

Title (en)
VALVE FOR CONTROLLING A FLUID WITH INCREASED SEALING ACTION

Title (de)
VENTIL ZUM STEUERN EINES FLUIDS MIT ERHÖHTER DICHTHEIT

Title (fr)
SOUPAPE DE COMMANDE DE FLUIDE À ÉTANCHÉITÉ RENFORCÉE

Publication
EP 2971749 B1 20190313 (DE)

Application
EP 14700722 A 20140117

Priority
• DE 102013204152 A 20130311
• EP 2014050886 W 20140117

Abstract (en)
[origin: WO2014139706A1] The invention relates to a valve for controlling a fluid, in particular fuel, comprising a closing element (2) and a valve seat (3), wherein the valve seat (3) has a sealing region (4) and a valve seat region (5) which adjoins the sealing region (4), wherein the closing element (2) seals on the sealing region (4), wherein the sealing region (4) and the valve seat region (5) merge into one another in a direct and stepless manner, and wherein a hardness of the sealing region (4) is smaller than a hardness of the closing element (2).

IPC 8 full level
F02M 61/18 (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)
F02M 61/166 (2013.01 - EP US); **F02M 61/1886** (2013.01 - EP US); **F02M 63/0024** (2013.01 - US); **F02M 63/0077** (2013.01 - US)

Citation (examination)
• DE 102012205564 A1 20121011 - DENSO CORP [JP]
• EP 2025924 A2 20090218 - BOSCH GMBH ROBERT [DE]

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)
DE 102013204152 A1 20140911; CN 105008710 A 20151028; CN 105008710 B 20181130; EP 2971749 A1 20160120;
EP 2971749 B1 20190313; JP 2016509162 A 20160324; JP 6297608 B2 20180320; KR 20150130292 A 20151123; US 10125735 B2 20181113;
US 2016017855 A1 20160121; WO 2014139706 A1 20140918

DOCDB simple family (application)
DE 102013204152 A 20130311; CN 201480012969 A 20140117; EP 14700722 A 20140117; EP 2014050886 W 20140117;
JP 2015561987 A 20140117; KR 20157024772 A 20140117; US 201414772445 A 20140117