

Title (en)  
VALVE DEVICE IN A MOTOR VEHICLE, AND PRODUCTION METHOD

Title (de)  
VENTILVORRICHTUNG IN EINEM KRAFTFAHRZEUG UND VERFAHREN ZUR HERSTELLUNG

Title (fr)  
SYSTÈME DE SOUPAPE DANS UN VÉHICULE AUTOMOBILE ET PROCÉDÉ DE FABRICATION

Publication  
**EP 3234422 A1 20171025 (DE)**

Application  
**EP 15816721 A 20151215**

Priority  
• DE 102014226722 A 20141219  
• DE 102015200187 A 20150109  
• EP 2015079772 W 20151215

Abstract (en)  
[origin: WO2016096842A1] The invention relates to a valve device for a fuel cell arrangement in a motor vehicle, having a flow duct (2) which runs in a housing (1), having a flap (8) which influences the flow cross section, and having a drive which drives the flap, wherein the flap is fastened to a spindle (3) and the spindle is mounted rotatably in the housing, having a valve seat (12) which is arranged in the flow duct, and having a seal (11) which is arranged on a radially encircling edge (10) of the flap and which, in a closed position of the flap, is in contact with the valve seat such that the spindle extends through the flap at an angle. The seal has a ring-shaped main body (15) which has at least one recess (13), wherein the at least one recess is filled with the material of the flap.

IPC 8 full level  
**F16K 1/226** (2006.01); **H01M 2/12** (2006.01); **H01M 8/04** (2016.01)

CPC (source: CN EP KR US)  
**B29C 45/2608** (2013.01 - US); **F16K 1/2261** (2013.01 - CN EP KR US); **F16K 25/005** (2013.01 - US); **H01M 8/04** (2013.01 - EP US); **H01M 8/04014** (2013.01 - EP KR US); **B29L 2031/7506** (2013.01 - US); **H01M 2250/20** (2013.01 - EP KR US); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP KR US); **Y02T 90/40** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2016096842A1

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)  
**DE 102015200187 A1 20160623**; CN 107110378 A 20170829; EP 3234422 A1 20171025; KR 20170097733 A 20170828; US 2017370478 A1 20171228; WO 2016096842 A1 20160623

DOCDB simple family (application)  
**DE 102015200187 A 20150109**; CN 201580069258 A 20151215; EP 15816721 A 20151215; EP 2015079772 W 20151215; KR 20177020120 A 20151215; US 201515536854 A 20151215