

Title (en)  
VALVE DEVICE

Title (de)  
VENTILVORRICHTUNG

Title (fr)  
DISPOSITIF DE SOUPAPE

Publication  
**EP 4256254 A1 20231011 (DE)**

Application  
**EP 21835595 A 20211201**

Priority  
• DE 102020215115 A 20201201  
• EP 2021083771 W 20211201

Abstract (en)  
[origin: WO2022117648A1] The invention relates to a valve device (10), in particular an expansion valve, for controlling a flow of a fluid, particularly for a refrigerant circuit in a vehicle, the valve device (10) comprising a valve element housing (12) with at least three ports (22a, 22b, 22c), and a valve element (14), the valve element (14) having a control flow hole (30) for a main fluid flow (32) and at least one expansion cutout (40), the ports (22a, 22b, 22c) being fluidically connected to an inner volume (26) inside the housing, the inner volume (26) being formed between the valve element (14) and the valve element housing (12), at least one of the ports (22a, 22b, 22c) being a fluid inlet (23a, 23b, 23c) and at least one of the ports (22a, 22b, 22b) being a fluid outlet (23a, 23b, 23c). According to the invention, the valve element (14) has a separation element (42) designed to fluidically separate the expansion cutout (40) from the control flow hole (30) within the valve element (14).

IPC 8 full level  
**F25B 41/35** (2021.01); **F16K 3/34** (2006.01)

CPC (source: EP)  
**F16K 11/0873** (2013.01); **F25B 41/35** (2021.01); **F25B 2500/18** (2013.01); **Y02B 30/70** (2013.01)

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**WO 2022117648 A1 20220609**; CN 116783432 A 20230919; DE 102020215115 A1 20220602; EP 4256254 A1 20231011

DOCDB simple family (application)  
**EP 2021083771 W 20211201**; CN 202180092518 A 20211201; DE 102020215115 A 20201201; EP 21835595 A 20211201