

Title (en)  
FILTER DEVICE, AND METHOD FOR CLEANING SAME

Title (de)  
FILTEREINRICHTUNG UND VERFAHREN ZU DEREN ABREINIGUNG

Title (fr)  
DISPOSITIF DE FILTRATION ET PROCÉDÉ DE NETTOYAGE Y RELATIF

Publication  
**EP 4216785 A1 20230802 (DE)**

Application  
**EP 21777461 A 20210910**

Priority

- EP 20197753 A 20200923
- EP 2021074947 W 20210910

Abstract (en)  
[origin: WO2022063605A1] The invention relates to a filter device for a vacuum cleaner, said filter device comprising a turbine device and a motor for generating a first main air flow and/or a second main air flow through a collecting container of the vacuum cleaner, wherein the vacuum cleaner comprises two chambers, and filter elements of the proposed filter device are cleaned by a sudden change in position of a pressure surge element in the chambers. Since, when cleaning one of the two chambers, the suction operation of the vacuum cleaner can be maintained by the other chamber, the filter can advantageously be cleaned during a continued suction operation of the vacuum cleaner. In a second aspect, the invention relates to a method for cleaning a filter device in a vacuum cleaner, wherein a volume of air is displaced from one of the two chambers by actuating a valve. Advantageously, this change in pressure changes the position of the pressure surge element, which can result in a backwash pulse and in the filter element being mechanically vibrated, and can result in the filter element being cleaned.

IPC 8 full level  
**A47L 9/10** (2006.01); **A47L 5/36** (2006.01); **A47L 9/12** (2006.01); **A47L 9/20** (2006.01)

CPC (source: EP US)  
**A47L 5/365** (2013.01 - EP US); **A47L 9/122** (2013.01 - EP US); **A47L 9/1409** (2013.01 - US); **A47L 9/20** (2013.01 - EP US); **B01D 46/0043** (2013.01 - US); **B01D 46/10** (2013.01 - US); **B01D 46/12** (2013.01 - US); **B01D 46/4272** (2013.01 - US); **B01D 46/58** (2022.01 - US); **B01D 46/71** (2022.01 - US); **B01D 46/74** (2022.01 - US); **F16K 15/147** (2013.01 - US); **B01D 2273/30** (2013.01 - US); **B01D 2279/55** (2013.01 - US)

Citation (search report)  
See references of WO 2022063606A1

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)  
**EP 3973838 A1 20220330**; EP 4216784 A1 20230802; EP 4216785 A1 20230802; US 2023263351 A1 20230824; US 2023309771 A1 20231005; WO 2022063605 A1 20220331; WO 2022063605 A9 20230330; WO 2022063606 A1 20220331

DOCDB simple family (application)  
**EP 20197753 A 20200923**; EP 2021074946 W 20210910; EP 2021074947 W 20210910; EP 21777460 A 20210910; EP 21777461 A 20210910; US 202118024372 A 20210910; US 202118024653 A 20210910