

Title (en)
DUST-CATCHING DEVICE AND AIR CLEANING DEVICE USING SAME

Title (de)
STAUBFÄNGER UND LUFTREINIGUNGSVORRICHTUNG DAMIT

Title (fr)
DISPOSITIF DE DÉPOUSSIÉRAGE ET DISPOSITIF D'ÉPURATION DE L'AIR UTILISANT CE DISPOSITIF

Publication
EP 2974641 A4 20160302 (EN)

Application
EP 14764800 A 20140228

Priority

- JP 2013050037 A 20130313
- JP 2013153469 A 20130724
- JP 2013171034 A 20130821
- JP 2014001087 W 20140228

Abstract (en)
[origin: EP2974641A1] The dust-catching device is provided with a swirl generation unit (10) placed within an air passage, and a dust-catching chamber, which collects and stores dirt and dust that has been separated at the swirl generation unit (10). The swirl generation unit (10) has a cylindrical casing (13) having an air flow inlet (17) disposed at the upstream side of the air passage, an air flow outlet (18) disposed at the downstream side within the air passage, and an ejection outlet (16) for dirt and dust which is disposed on the outer periphery portion which is connected to an aperture of the dust-catching chamber. In addition, the swirl generation unit (10) is provided with a spiral gyration promoting surface (14), which promotes gyration of air, disposed at the upstream side of the air passage of the cylindrical casing (13). Furthermore, the air flow inlet (17) is formed from two sides including the gyration promoting surface (14), and a portion of the sidewall of the cylindrical casing (13) as another side.

IPC 8 full level
A47L 9/16 (2006.01); **B04C 3/06** (2006.01); **F24F 8/183** (2021.01)

CPC (source: EP US)
B04C 3/06 (2013.01 - EP); **F24F 8/183** (2021.01 - EP US); **B04C 2003/006** (2013.01 - EP); **F24F 8/10** (2021.01 - EP)

Citation (search report)

- [YA] EP 2201879 A2 20100630 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- [YA] EP 1842597 A2 20071010 - LG ELECTRONICS INC [KR]
- See references of WO 2014141614A1

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

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DOCDB simple family (application)
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