

Title (en)

AIRFLOW CONVERSION DEVICE AND DUST COLLECTOR COMPRISING SAME

Title (de)

LUFTSTROMUMWANDLUNGSVORRICHTUNG UND STAUBSAMMLER DAMIT

Title (fr)

DISPOSITIF DE CONVERSION DE FLUX D'AIR ET COLLECTEUR DE POUSSIÈRE LE COMPRENANT

Publication

EP 3838090 A1 20210623 (EN)

Application

EP 19874489 A 20190805

Priority

- CN 201811195428 A 20181015
- CN 2019099176 W 20190805

Abstract (en)

An airflow conversion device and a dust collector including the same are provided. The airflow conversion device includes a first portion (100), a second portion (200) and an impeller structure (300). A first flow channel is formed in the first portion (100). A second flow channel is formed in the second portion (200). The impeller structure (300) is configured as: when driving airflow is provided to one of the first flow channel and the second flow channel, the driving airflow makes the impeller structure (300) to rotate. Under an action of the impeller structure (300), the other one of the first flow channel and the second flow channel generates airflow in an opposite direction from the driving airflow. The airflow conversion device provided by the present invention is provided with the first flow channel and the second flow channel, and enables one of the flow channels to generate airflow in the opposite direction from the driving airflow provided to the other flow channel by means of the impeller structure (300). The airflow conversion device is applied to air suction or air blowing equipment, so that the equipment has plentiful functions without changing the structure of the equipment.

IPC 8 full level

A47L 7/06 (2006.01); **A47L 9/00** (2006.01)

CPC (source: CN EP)

A47L 5/14 (2013.01 - EP); **A47L 7/04** (2013.01 - EP); **A47L 7/06** (2013.01 - CN); **A47L 9/00** (2013.01 - CN); **F04D 19/002** (2013.01 - EP); **F04D 25/04** (2013.01 - EP)

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)

EP 3838090 A1 20210623; **EP 3838090 A4 20211013**; CN 109288447 A 20190201; JP 2022500586 A 20220104; JP 7083425 B2 20220610; WO 2020078074 A1 20200423

DOCDB simple family (application)

EP 19874489 A 20190805; CN 201811195428 A 20181015; CN 2019099176 W 20190805; JP 2021513465 A 20190805