

Title (en)  
Ventilator assembly with flow rectifier

Title (de)  
Ventilatoranordnung mit Strömungsgleichrichter

Title (fr)  
Agencement de ventilateur avec redresseur de courant

Publication  
**EP 2778432 B1 20151014 (DE)**

Application  
**EP 13159536 A 20130315**

Priority  
EP 13159536 A 20130315

Abstract (en)  
[origin: US2014209275A1] A ventilation device, in particular for heating, cooling and/or humidifying air in residential buildings, includes a duct-shaped housing (1) with an air inlet opening (2) and an air outlet opening (3), and a fan impeller (6) as well as a filter unit, heat exchange unit and/or heating coil unit (14) arranged in the main flow direction (Z) of an air flow generated by the fan impeller (6). An air guiding device (17) is arranged in the flow direction (Z) of the air flow in front of a suction nozzle (16)—configured as a flow conditioner, includes a bar structure with air guiding bars—such that a flow inlet opening is configured on the suction side at an axial height in front of the flow inlet opening (15) by the bar structure whose opening surface is smaller than the opening surface of the flow inlet opening (15).

IPC 8 full level  
**F04D 29/54** (2006.01); **F04D 29/66** (2006.01); **F04D 29/70** (2006.01)

CPC (source: EP US)  
**F04D 29/541** (2013.01 - EP US); **F04D 29/663** (2013.01 - EP US); **F04D 29/703** (2013.01 - EP US); **F24F 7/06** (2013.01 - US);  
**F24F 13/10** (2013.01 - US); **F24F 2013/088** (2013.01 - US)

Cited by  
DE102016115616A1; DE102015107907A1; US9835176B2; DE202015102578U1; DE202016104610U1; US11047394B2; WO2016184970A1;  
US10590954B2; DE202015104813U1; DE102015115308A1; WO2017041967A1; US10781829B2; EP3631210B1

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

DOCDB simple family (publication)  
**US 2014209275 A1 20140731; US 9932990 B2 20180403**; CN 105102825 A 20151125; CN 105102825 B 20180710; DK 2778432 T3 20160125;  
EP 2778432 A1 20140917; EP 2778432 B1 20151014; ES 2555292 T3 20151230; KR 101808583 B1 20171213; KR 20150128675 A 20151118;  
PT 2778432 E 20160129; WO 2014139959 A1 20140918

DOCDB simple family (application)  
**US 201414163590 A 20140124**; CN 201480012256 A 20140310; DK 13159536 T 20130315; EP 13159536 A 20130315;  
EP 2014054597 W 20140310; ES 13159536 T 20130315; KR 20157022824 A 20140310; PT 13159536 T 20130315