

Title (en)  
FAN ASSEMBLY

Title (de)  
LÜFTERBAUGRUPPE

Title (fr)  
ENSEMBLE DE VENTILATEUR

Publication  
**EP 3227562 A1 20171011 (EN)**

Application  
**EP 16712027 A 20160324**

Priority  
• EP 15161627 A 20150330  
• EP 2016056480 W 20160324

Abstract (en)  
[origin: WO2016156174A1] A fan assembly (10) includes a housing (20) with an air inlet (70), a fan inlet (60), and an air outlet (80). The fan assembly further includes an impeller (30) and a motor (40) configured to drive the impeller, the impeller having a plurality of circumferentially positioned spaced blades (34). An air-permeable guard (50) is positioned between the air inlet and the fan inlet to prevent users from touching the impeller (30), and is spaced a first distance (54) from the fan inlet (60), and a second distance from the air inlet (70) so that a filter (90) may be provided between the air inlet (70) and the air-permeable guard (50). Preferably, the first distance (54) is such so as to allow incoming air to at least partially rotate prior to entering the fan inlet. Preferably, the plurality of circumferentially positioned spaced blades (34) is positioned circumferentially around a domed center (32) of the impeller (30), the domed center (32) facing the fan inlet (60), and the domed center (32) co-rotates with the spaced blades (34).

IPC 8 full level  
**F04D 29/28** (2006.01); **F04D 29/42** (2006.01); **F04D 29/70** (2006.01)

CPC (source: CN EP RU US)  
**F04D 25/08** (2013.01 - US); **F04D 29/282** (2013.01 - CN EP US); **F04D 29/283** (2013.01 - US); **F04D 29/4213** (2013.01 - CN); **F04D 29/4226** (2013.01 - EP US); **F04D 29/703** (2013.01 - CN EP US); **F04D 29/28** (2013.01 - RU)

Citation (search report)  
See references of WO 2016156174A1

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)  
**WO 2016156174 A1 20161006**; CN 107110175 A 20170829; CN 107110175 B 20190308; EP 3227562 A1 20171011; EP 3227562 B1 20190109; JP 2018503771 A 20180208; RU 2642942 C1 20180129; TR 201904156 T4 20190422; US 2018023588 A1 20180125

DOCDB simple family (application)  
**EP 2016056480 W 20160324**; CN 201680005183 A 20160324; EP 16712027 A 20160324; JP 2017538641 A 20160324; RU 2017128808 A 20160324; TR 201904156 T 20160324; US 201615539352 A 20160324