

Title (en)  
DIAGONAL FLOW FAN

Title (de)  
DIAGONALLÜFTER

Title (fr)  
VENTILATEUR À ÉCOULEMENT DIAGONAL

Publication  
**EP 3211247 A1 20170830 (EN)**

Application  
**EP 14904616 A 20141022**

Priority  
CN 2014089118 W 20141022

Abstract (en)

A diagonal flow fan, comprising an airflow duct (8), a motor (6), an impeller (2), a blade (4), an airflow guide ring (1) and a hub (3); one end of the airflow guide ring (1) is connected to the airflow duct (8); the blade (4) and the hub (3) are located inside the impeller (2); one end of the blade (4) is connected to the hub (3), and the other end is connected to the impeller (2); the motor (6) is located inside and connected to the hub (3); the other end of the airflow guide ring (1) is located at an inner side of the impeller (2), and a gap exists between the airflow guide ring (1) and the impeller (2); a motor shaft matches the impeller (2), employing a concentric positioning configuration; and a balance component (9) is fixedly installed at a peripheral surface of the impeller (2), thereby achieving dynamic balancing. The diagonal flow fan has a compact structure and a dramatically improved overall efficiency.

IPC 8 full level  
**F04D 29/52** (2006.01); **F04D 25/08** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP US)  
**F04D 17/06** (2013.01 - EP US); **F04D 25/06** (2013.01 - US); **F04D 25/08** (2013.01 - US); **F04D 29/162** (2013.01 - EP US);  
**F04D 29/325** (2013.01 - US); **F04D 29/526** (2013.01 - US); **F04D 29/541** (2013.01 - US); **F04D 29/662** (2013.01 - EP US)

Cited by  
CN110566481A

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)  
**US 2017045060 A1 20170216**; CN 106471259 A 20170301; EP 3211247 A1 20170830; EP 3211247 A4 20181024; EP 3211247 B1 20191127;  
WO 2016061747 A1 20160428

DOCDB simple family (application)  
**US 201415306033 A 20141022**; CN 2014089118 W 20141022; CN 201480080248 A 20141022; EP 14904616 A 20141022