

Title (en)  
OBLIQUE FLOW BOOSTER FAN

Title (de)  
DIAGONALGEBLÄSE

Title (fr)  
VENTILATEUR À FLUX OBLIQUE

Publication  
**EP 3879113 A1 20210915 (EN)**

Application  
**EP 21161310 A 20210308**

Priority  
CN 202020282730 U 20200309

Abstract (en)  
An oblique flow booster fan includes an impeller having an impeller body and a plurality of blades, each blade spirally extended from top to bottom, two ends of each blade provided an upper edge and a lower edge respectively, and the upper edge having a width larger than the lower edge; an air guide assembly including an outer ring, an inner cylinder spaced apart in the outer ring, and air guide vanes evenly connected between the outer ring and the inner cylinder; a motor installed in the inner cylinder and having a rotating shaft connected to the impeller body; and a pressurization volute casing arranged outside the impeller and connected to the outer ring, one end of the pressurization volute casing provided with an air inlet, and another end of the outer ring provided with an air outlet. The fan is high wind pressure and low noise.

IPC 8 full level  
**F04D 17/06** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP US)  
**F04D 17/06** (2013.01 - EP); **F04D 19/002** (2013.01 - US); **F04D 29/4253** (2013.01 - EP); **F04D 29/444** (2013.01 - EP);  
**F04D 29/522** (2013.01 - US); **F04D 29/626** (2013.01 - EP)

Citation (search report)  
• [XAI] US 2019219062 A1 20190718 - TATARA TATSUYA [JP], et al  
• [A] US 2008178879 A1 20080731 - ROBERTS STEPHEN KEIR [CA], et al  
• [X] US 2019024676 A1 20190124 - YANG CHAO-FU [TW]  
• [X] US 2019145657 A1 20190516 - PIROUZPANAH SAHAND [US], et al

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 3879113 A1 20210915**; **EP 3879113 B1 20230607**; **EP 3879113 C0 20230607**; CN 211820009 U 20201030; ES 2949813 T3 20231003;  
US 2021277914 A1 20210909

DOCDB simple family (application)  
**EP 21161310 A 20210308**; CN 202020282730 U 20200309; ES 21161310 T 20210308; US 202017005698 A 20200828