

Title (en)  
CROSS FLOW FAN AND AIR CONDITIONER EQUIPPED WITH SAME

Title (de)  
QUERSTROMLÜFTER UND KLIMAANLAGE DAMIT

Title (fr)  
VENTILATEUR TANGENTIEL ET CLIMATISEUR EQUIPE DU VENTILATEUR

Publication  
**EP 2280176 B1 20200122 (EN)**

Application  
**EP 09742709 A 20090430**

Priority  
• JP 2009058448 W 20090430  
• JP 2008123449 A 20080509

Abstract (en)  
[origin: EP2280176A1] A crossflow fan includes an impeller formed by plate-like blades 42. Each blade 42 is inclined such that the outer edge 42a is located on the leading side of the inner edge 42d with respect to the rotation direction of the impeller 41. The face of each blade 42 that is located on the leading side of the rotation direction forms a positive pressure surface 42p, and a face located on the trailing side forms a negative pressure surface 42q. Notches 42b are formed at the outer edge 42a of the blade 42. The notches 42b are arranged at predetermined intervals along the rotation axis of the impeller. The bottom 42y of the notch 42b is connected to the positive pressure surface 42p at a positive pressure corner 42n and connected to the negative pressure surface 42q at a negative pressure corner 42m. The positive pressure corner 42n and the negative pressure corner 42m are both rounded.

IPC 8 full level  
**F04D 17/04** (2006.01); **F24F 1/0057** (2019.01); **F24F 1/0063** (2019.01)

CPC (source: EP US)  
**F04D 17/04** (2013.01 - EP US); **F04D 17/06** (2013.01 - EP US); **F04D 29/283** (2013.01 - EP US); **F24F 1/0025** (2013.01 - EP US); **F24F 1/0057** (2019.01 - EP US); **F24F 1/0063** (2019.01 - EP US); **F24F 7/007** (2013.01 - EP US)

Citation (examination)  
JP H10252689 A 19980922 - MITSUBISHI ELECTRIC CORP

Cited by  
EP2672080A3

Designated contracting state (EPC)  
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 SE SI SK TR

DOCDB simple family (publication)  
**EP 2280176 A1 20110202; EP 2280176 A4 20161026; EP 2280176 B1 20200122**; AU 2009245176 A1 20091112; AU 2009245176 B2 20110811; CN 101999044 A 20110330; CN 101999044 B 20121017; ES 2784543 T3 20200928; JP 2009270530 A 20091119; JP 4371171 B2 20091125; KR 101233538 B1 20130214; KR 20100135831 A 20101227; US 2011033306 A1 20110210; WO 2009136585 A1 20091112

DOCDB simple family (application)  
**EP 09742709 A 20090430**; AU 2009245176 A 20090430; CN 200980112728 A 20090430; ES 09742709 T 20090430; JP 2008123449 A 20080509; JP 2009058448 W 20090430; KR 20107023472 A 20090430; US 93783309 A 20090430