

Title (en)

CROSS-FLOW FAN

Title (de)

QUERSTROMGEBLÄSE

Title (fr)

VENTILATEUR À FLUX TRANSVERSAL

Publication

EP 2894344 A4 20150812 (EN)

Application

EP 13835808 A 20130829

Priority

- JP 2012194256 A 20120904
- JP 2013073142 W 20130829

Abstract (en)

[origin: EP2894344A1] To reinforce the strength of a cross-flow fan while controlling an increase in flow path loss caused by a reinforcement member of the cross-flow fan such as a support plate. Plural blades (40) extend in a lengthwise direction from a support plate (50). An auxiliary ring (60) is positioned on a lengthwise direction intermediate section of the plural blades (40) and is combined with outer ends (40a) of the plural blades (40). The auxiliary ring (60) is located in a position away from blade base portions (40c) on the support plate side of the blades (40) by a distance equal to or greater than 55% of the long dimension from the blade base portions (40c) to blade distal end portions (40d).

IPC 8 full level

F04D 17/04 (2006.01); **F04D 29/28** (2006.01); **F04D 29/66** (2006.01)

CPC (source: CN EP)

F04D 17/04 (2013.01 - CN EP); **F04D 29/283** (2013.01 - CN EP); **F04D 29/30** (2013.01 - CN); **F04D 29/662** (2013.01 - CN EP); **F05D 2240/304** (2013.01 - CN); **F05D 2300/43** (2013.01 - EP)

Citation (search report)

- [X] JP S51154411 U 19761209
- [X] GB 986222 A 19650317 - FIRTH CLEVELAND LTD
- [X] JP 2001193689 A 20010717 - MITSUBISHI ELECTRIC CORP
- [X] JP S5166210 U 19760525
- [A] EP 2096318 A1 20090902 - DAIKIN IND LTD [JP]
- [A] JP S51150712 A 19761224 - HITACHI LTD
- [A] JP 2010007609 A 20100114 - DAIKIN IND LTD, et al
- See references of WO 2014038465A1

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US10302096B2

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 2894344 A1 20150715; **EP 2894344 A4 20150812**; **EP 2894344 B1 20170329**; CN 104603465 A 20150506; CN 104603465 B 20160928; ES 2625978 T3 20170721; JP 2014047773 A 20140317; JP 5704139 B2 20150422; WO 2014038465 A1 20140313

DOCDB simple family (application)

EP 13835808 A 20130829; CN 201380045940 A 20130829; ES 13835808 T 20130829; JP 2012194256 A 20120904; JP 2013073142 W 20130829