Title (en)

A cross-flow fan and an air-conditioner using it

Title (de)

Querstromlüfter und damit versehene Klimaanlage

Title (fr)

Ventilateur à courant transversal et climatiseur l'utilisant

Publication

EP 0947708 A3 20010307 (EN)

Application

EP 99106442 A 19990329

Priority

JP 8327898 A 19980330

Abstract (en)

[origin: EP0947708A2] A number of vanes 12 are disposed in a peripheral direction of a plurality of supporting disks disposed along a rotary shaft 14 at given intervals. Each vane 12 is disposed at an angular interval as determined by a logistic representation. Thereby the intensity and variations of noise levels at around 8N on the low-frequency side, as well as the noise level caused by rotary first-order sounds, can be reduced. <IMAGE>

IPC 1-7

F04D 29/66; F04D 29/28

IPC 8 full level

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

CPC (source: EP KR)

F04D 29/283 (2013.01 - EP); **F04D 29/666** (2013.01 - EP); **F24F 13/00** (2013.01 - KR)

Citation (search report)

- [A] US 5266007 A 19931130 - BUSHNELL PETER R [US], et al
- [A] EP 0785362 A1 19970723 - MITSUBISHI ELECTRIC CORP [JP]
- [A] DE 4421604 C1 19950413 - SIEMENS AG [DE]
- [A] US 5681145 A 19971028 - NEELY MICHAEL J [US], et al
- [A] MELLIN R C ET AL: "CONTROLLING THE TONAL CHARACTERISTICS OF THE AERODYNAMIC NOISE GENERATED BY FAN ROTORS", TRANSACTIONS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, SERIES D: JOURNAL OF BASIC ENGINEERING,US,ASME. NEW YORK, vol. 92, no. 1, 1 March 1970 (1970-03-01), pages 143 - 154, XP002030072

Cited by

CN114060302A; CN110857701A; EP1119082A3

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EP 0947708 A2 19991006; **EP 0947708 A3 20010307**; **EP 0947708 B1 20050202**; DE 69923490 D1 20050310; DE 69923490 T2 20060216; KR 100545985 B1 20060125; KR 19990078295 A 19991025; TW 377393 B 19991221

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