Title (en)

BLOWER, AND OUTDOOR UNIT FOR AIR CONDITIONER

Title (de)

GEBLÄSE UND AUSSENEINHEIT FÜR KLIMAANLAGE

Title (fr)

SOUFFLANTE ET UNITE EXTERIEURE POUR CONDITIONNEUR D'AIR

Publication

EP 1357296 B1 20060628 (EN)

Application

EP 01272799 A 20011205

Priority

- JP 0110599 W 20011205
- JP 2000400530 A 20001228

Abstract (en)

[origin: EP1357296A1] Generation and growth of a wing tip vortex in a part of an outer peripheral portion of a blade not surrounded by a bell mouth is restrained to reduce noise (i.e., operation noise) generated by collision of the wing tip vortex and a fan guard on a blowoff side of a propeller fan. A ratio H1/H0 is set in a range of H1/H0 = 0.40 to 0.65 where H1 denotes a height of a portion of an axis directional height of the bell mouth 5 that is overlapped with an outer peripheral portion P of the blade 13, while H0 denotes an axis directional height of the outer peripheral portion P of the blade 13, so as to restrain growth of a leakage flow (i.e., a wing tip vortex) from a positive pressure surface to a negative pressure surface of the blade 13 in a part of the outer peripheral portion P of the blade 13 not surrounded by the bell mouth 5 while maintaining a suction flow from the outer peripheral portion P of the blade 13. <IMAGE>

IPC 8 full level

F04D 29/38 (2006.01); **F04D 29/54** (2006.01)

CPC (source: EP)

F04D 29/384 (2013.01); **F04D 29/545** (2013.01)

Cited by

EP1610068A4; US10221860B2; US10094392B2; US9822778B2; US9927136B2; US10408478B2; US10344773B2; US10612565B2; US10100836B2; US10465928B2; US9513021B2; US9903602B2; US9982677B2; US10094581B2; US9926804B2; US10145583B2; US9752789B2; US9797613B2; US10563875B2; US8721280B2; US9745981B2; US9797612B2

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