

Title (en)  
Indoor unit and air-conditioner

Title (de)  
Innenraumeinheit und Klimaanlage

Title (fr)  
Unité intérieure et conditionneur d'air

Publication  
**EP 1243864 A2 20020925 (EN)**

Application  
**EP 02006380 A 20020321**

Priority  

- JP 2001084413 A 20010323
- JP 2001084414 A 20010323
- JP 2001084415 A 20010323
- JP 2001084416 A 20010323

Abstract (en)

In an indoor unit, when the fan diameter of a tangential fan (14) is taken to be D, and the width of the intake diaphragm provided on the upstream side of the inlet of an air duct (40) inside the casing is taken to be f, f/D is within the range of 0.002 to 0.003 ( $0.002 \leq f/D \leq 0.003$ ). In addition, when the width of the outlet of an air duct (40) formed between the outer peripheral surface (14a) of a tangential fan (14) and the air duct wall surface (41) of the casing is taken to be Wo, Wo/D is 0.55 or less ( $Wo/D \leq 0.55$ ). In addition, when a line extending in the direction of flow along the upper surface that forms the discharge port serving as the air duct outlet in the casing is taken to be a, the stabilizer tongue end angle alpha, which is formed between the surface of the stabilizer opposing tangential fan (14) and the extended line a, is within the range of 50 degrees to 60 degrees ( $50^\circ \leq \alpha \leq 60^\circ$ ). In addition, when the distance between the extended line a and a tangent b of the fan diameter D parallel to said extended line a is taken to be d, d/D is within the range of -0.2 to 0.2 ( $-0.2 \leq d/D \leq 0.2$ ). <IMAGE>

IPC 1-7  
**F24F 1/00; F24F 13/24**

IPC 8 full level  
**F04D 29/42** (2006.01); **F04D 29/66** (2006.01); **F24F 1/00** (2011.01)

CPC (source: EP)  
**F04D 29/422** (2013.01); **F04D 29/663** (2013.01); **F24F 1/0011** (2013.01); **F24F 1/0025** (2013.01)

Cited by

EP4310404A4; CN107490064A; CN111997936A; CN112253541A; EP2203688A4; CN107490066A; CN103486661A; CN112432355A; EP2664799A1; EP3088806A4; CN114636197A; WO2009054588A1; WO2023236680A1; US9803340B2; US10443214B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1243864 A2 20020925; EP 1243864 A3 20030102; EP 1243864 B1 20071010**; AT E375483 T1 20071015; CN 1282853 C 20061101; CN 1376878 A 20021030; DE 60222823 D1 20071122; ES 2291387 T3 20080301

DOCDB simple family (application)

**EP 02006380 A 20020321**; AT 02006380 T 20020321; CN 02107491 A 20020320; DE 60222823 T 20020321; ES 02006380 T 20020321