

Title (en)

Axial fan inlet duct system with sound attenuation

Title (de)

Einlasskanal für Axiallüfter mit Schalldämpfung

Title (fr)

Conduit d'admission pour ventilateur axial avec atténuation acoustique

Publication

**EP 1662149 A1 20060531 (EN)**

Application

**EP 04028226 A 20041129**

Priority

EP 04028226 A 20041129

Abstract (en)

A sound attenuating duct unit (55) for delivery of air to an inlet of a fan unit includes an elongate duct for transferring air to an outlet end adapted for connection to the inlet of the fan unit. This duct has a substantial bend formed therein and a splitter mechanism (76) is rigidly mounted inside the duct for providing sound attenuation. This splitter mechanism (76) is located upstream from the bend and extends longitudinally in the direction of airflow. The duct unit has a curved intake baffle (116) fixedly mounted in a lower end section of the duct (55) and this baffle (116) extends about and below a central axis (X-X) of the lower end section. The baffle (116) converges inwardly towards the outlet end (104) and is spaced from the central axis. Preferably, at least one vane member (132,134) is also mounted in the lower end section for turning the airflow to a horizontal direction and at least a portion of this vane member is curved in a vertical plane that is parallel to the central axis.

IPC 8 full level

**F04D 29/54** (2006.01); **F02C 7/045** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP)

**F04D 29/4213** (2013.01); **F04D 29/545** (2013.01)

Citation (applicant)

- US 5728979 A 19980317 - YAZICI MUAMMER [CA], et al
- US 2002182061 A1 20021205 - HAN MING HUI [CA]

Citation (search report)

- [AD] EP 1262666 A2 20021204 - M & I HEAT TRANSFER PRODUCTS L [CA]
- [AD] US 5728979 A 19980317 - YAZICI MUAMMER [CA], et al
- [A] DE 815374 C 19511001 - VOITH GMBH J M
- [A] CH 155863 A 19320715 - SULZER AG [CH]
- [A] US 3698509 A 19721017 - FITTING SAMUEL E, et al
- [A] EP 0044564 A1 19820127 - NISSAN MOTOR [JP]

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Designated contracting state (EPC)

DE

DOCDB simple family (publication)

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