

Title (en)

DEVICE FOR REDUCING FAN-GENERATED NOISE

Title (de)

VORRICHTUNG ZUR REDUZIERUNG VON LÜFTERGERÄUSCHEN

Title (fr)

DISPOSITIF PERMETTANT DE RÉDUIRE LE BRUIT GÉNÉRÉ PAR UN VENTILATEUR

Publication

**EP 3927976 C0 20240424 (EN)**

Application

**EP 20704882 A 20200217**

Priority

- IT 201900002403 A 20190219
- EP 2020054014 W 20200217

Abstract (en)

[origin: WO2020169498A1] The present invention relates to a device (10) for reducing fan-generated noise, comprising: a plurality of grid elements (201, 902) identifying a main development plane, and empty portions (202) delimited by the grid elements (201, 902) and configured for the passage of an air flow through the device (10), wherein each of the grid elements (201, 902) comprises a respective inner cavity (501, 903) delimited by side walls, the side walls defining at least one tube opening (401) facing a respective one of the empty portions (202) and substantially orthogonal to the main development plane, the inner cavity (501, 903) being acoustic resonant for reducing the fan-generated noise. The device (10) has a substantially circular overall shape (101, 102, 103, 104) having a substantially circular outer edge (203), first grid elements (201) of the grid elements (201, 902) having their main direction of development aligned to the outer edge (203), the first grid elements (201) being tangentially arranged and aligned with each other on concentric circumferences in the substantially circular overall shape (101, 102, 103, 104).

IPC 8 full level

**F04D 19/00** (2006.01); **F01N 1/02** (2006.01); **F04D 25/08** (2006.01); **F04D 29/66** (2006.01); **F04D 29/70** (2006.01)

CPC (source: EP)

**F04D 19/002** (2013.01); **F04D 25/08** (2013.01); **F04D 29/663** (2013.01); **F04D 29/665** (2013.01); **F04D 29/703** (2013.01); **G10K 11/172** (2013.01)

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

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

**WO 2020169498 A1 20200827**; EP 3927976 A1 20211229; EP 3927976 B1 20240424; EP 3927976 C0 20240424;  
IT 201900002403 A1 20200819

DOCDB simple family (application)

**EP 2020054014 W 20200217**; EP 20704882 A 20200217; IT 201900002403 A 20190219