

Title (en)

AXIAL OR RADIAL FAN WITH BYPASS CHANNEL IN ELECTRONICS ENCLOSURE

Title (de)

AXIAL- ODER RADIALVENTILATOR MIT BYPASSKANAL IM ELEKTRONIKGEHÄUSE

Title (fr)

VENTILATEUR AXIAL OU RADIAL DOTÉ D'UN CANAL DE DÉRIVATION DANS LE BOÎTIER ÉLECTRONIQUE

Publication

EP 3779208 B1 20230222 (DE)

Application

EP 20186423 A 20200717

Priority

DE 102019121450 A 20190808

Abstract (en)

[origin: CN211474466U] The utility model discloses an axial flow fan. The fan is provided with a motor and a fan impeller which can be driven by the motor and can rotate around a rotating shaft. Wherein the axial fan is arranged radially outside around the motor and generates a blow-off air flow from the suction side to the pressure side during operation, the motor electronic component is accommodated in the electronic component housing and is arranged axially adjacent to the motor. At least one through bypass channel is formed in the electronic device shell. Wherein the bypass channel extends axially from an inflow opening on the axial end side of the electronics housing opposite the fan wheel to the motor electronics and then extends radially outward along the motor electronics to a radial outflow opening on the electronics housing, the outlet opening is formed on or adjacent to the pressure side such that a blow-off air flow of the fan impeller generates an underpressure in a portion of the bypass passage adjacent to the outlet opening. The axial fan has improved cooling of the motor electronics with as little material cost as possible and low cost.

IPC 8 full level

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CPC (source: EP)

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