

Title (en)
AXIAL FAN

Publication
EP 0358731 B1 19910918 (DE)

Application
EP 89901524 A 19890130

Priority
DE 3804217 A 19880211

Abstract (en)
[origin: WO8907717A1] An axial fan, preferably for cooling an internal combustion engine in a motor vehicle, comprises an intake frame (2b) arranged in front of the impeller (12) when viewed in the direction of flow of the medium and a ring (20) arranged at the free ends of the impeller blades and surrounding the blade ring. The face of the ring (20) exposed to the flow is flared like a funnel, so that an axial gap (28) is created between the frame (26) and the ring (20). To obtain a particularly quiet axial fan, even in the absence of relatively close tolerances between impeller (12) and intake frame (26), the fan is provided with an outer ring (30) extending from the intake frame (26) in the direction of flow of the medium at least as far as the funnel rim (32) of the impeller ring, so as to create a radial gap (34) between the impeller ring and the outer ring (30).

IPC 1-7
F01P 5/06; F04D 29/54

IPC 8 full level
F01P 5/06 (2006.01); **F04D 29/54** (2006.01)

CPC (source: EP)
F01P 5/06 (2013.01); **F04D 29/547** (2013.01)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 8907717 A1 19890824; DE 3804217 A1 19880211; DE 58900303 D1 19911024; EP 0358731 A1 19900321; EP 0358731 B1 19910918;
JP H02503217 A 19901004

DOCDB simple family (application)
DE 8900051 W 19890130; DE 3804217 A 19880211; DE 58900303 T 19890130; EP 89901524 A 19890130; JP 50144189 A 19890130