

Title (en)
CROSS-FLOW VENTILATOR FOR THE TRANSPORT OF GAS

Publication
EP 0178645 B1 19890426 (DE)

Application
EP 85113116 A 19851016

Priority
DE 3438039 A 19841017

Abstract (en)
[origin: EP0178645A1] 1. Axial-flow ventilator for conveying gas to be conveyed, making possible also the conveyance of hot and/or very cold gases for conveying, preferably air, and having a housing in which the impeller is arranged, the bearings serving to mount the impeller in a rotary manner being, for the purpose of heat insulation, at considerable axial distances from the conveying area of the impeller, this conveying area serving to convey, through a suction opening and a blow-off opening of the housing, the gas to be conveyed, and the housing at the side of the suction opening and the blow-off opening having pot-shaped bulges, characterized in that on both sides of the conveying area (52) of the impeller (46) there are extension areas (48, 48') of the impeller, these being situated within the pot-shaped bulges (45, 45') of the housing (41), the blades (50) of the impeller (46) extending totally or almost totally over the length of the impeller, and the drive shaft (60) of the impeller engaging at the outer axial end of the one impeller extension area (48) and a journal (64) of the rotary mounting of the impeller engaging at the axial outer end of the other impeller extension area (48'), which journal is connected, in a rotationally rigid manner, to the axial end in question of the impeller (46) ; or in that the journal is secured on the housing and a friction bearing or antifriction bearing is arranged on the neighbouring axial end of the impeller ; and in that the extension areas (48, 48') of the impeller are impeller areas which are ineffective at conveying the gas to be conveyed.

IPC 1-7
F04D 17/04; **F04D 29/16**; **F04D 29/58**

IPC 8 full level
F04D 17/04 (2006.01); **F04D 29/16** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)
F04D 17/04 (2013.01); **F04D 29/162** (2013.01); **F04D 29/584** (2013.01)

Cited by
EP0643226A1; DE4412836A1; US2015024675A1; US10132514B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0178645 A1 19860423; **EP 0178645 B1 19890426**; AT E42613 T1 19890515; DE 3438039 A1 19860424; DE 3569793 D1 19890601

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EP 85113116 A 19851016; AT 85113116 T 19851016; DE 3438039 A 19841017; DE 3569793 T 19851016