

Title (en)
Radial ventilator.

Title (de)
Radialventilator.

Title (fr)
Ventilateur radial.

Publication
EP 0166174 A1 19860102 (DE)

Application
EP 85106055 A 19850517

Priority
DE 8416413 U 19840529

Abstract (en)
[origin: EP0166174B1] 1. Radial fan, comprising a polygonal housing (1a, b; 101a, b) with inlet (2 ; 102) and outlet (11 ; 111) which is directed approxiamtely at righth angles to it, an impeller (12) with curved blades rotatably disposed in the housing and driven via its shaft (13) and a suction opening opposite the inlet of the housing, whereby the inlet is located in one of the preferably approximately even end walls and the ouylet is located in one of the sides of the polygonal housing, whereby in addition the impeller has a smaller outside diameter than the diametral distance of two surfaces of the housing located opposite each other whereby finally a deflector plate (10) is located in the intermediate space between the impeller and housing next to the outlet and extends in the direction of rotation of the impeller and after it from end wall to end wall, the deflector plate running from the rear edge of the outlet in the direction of rotation of the impeller approximately radially inwards as far as the vicinity of the periphery of the impeller, characterised in that a) the shaft (13) for the impeller is mounted in the housing (1a, b ; 101a, b), b) the housing (1a, b ; 101a, b) is octagonal, c) the inlet (2) is located approximately in the centre of one of the end walls, d) the bearing of the impeller shaft (13) is located approximately in the centre of the other opposite end wall and e) the deflector plate (10) then runs from the vicinity of the impeller periphery approximately helically outwards to the housing wall.

Abstract (de)
Ein Radialventilator, der ein Gehäuse (1) mit axial gerichtetem Einlaß (2) und radial gerichtetem Auslaß (11) sowie ein in diesem Gehäuse gelagertes und drehbar angetriebenes Laufrad (12) mit gekrümmten Schaufeln umfaßt, ist aus einem Gehäuse mit achteckigem Außen- und Innenquerschnitt aufgebaut und enthält in der Nähe des radialen Auslasses ein sich von Stirnwand zu Stirnwand erstreckendes Leitblech (10), das von der in Drehrichtung des Laufrades hinteren Kante des Auslasses etwa radial einwärts, bis in die Nähe des Laufradumfanges, und anschließend etwa spiralförmig nach außen bis zur Gehäusewand führt. Bei einer besonderen Ausführung ist das Laufrad gegenüber der Gehäusemitte um einen gewissen Betrag versetzt.

IPC 1-7
F04D 29/42

IPC 8 full level
F04D 29/42 (2006.01)

CPC (source: EP US)
F04D 29/4226 (2013.01 - EP US)

Citation (search report)
• [A] US 3811790 A 19740521 - MIKULINA T, et al
• [A] FR 2224008 A7 19741025 - SIEMENS AG [DE]
• [A] US 2801042 A 19570730 - THYGESON JOHN R
• [A] FR 2271425 A1 19751212 - FIMEC [FR]

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