

Title (en)  
SIDE CHANNEL BLOWER

Title (de)  
SEITENKANALGEBLÄSE

Title (fr)  
SOUFFLANTE DE CANAL LATÉRAL

Publication  
**EP 3935283 B1 20240110 (DE)**

Application  
**EP 19710651 A 20190308**

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Abstract (en)  
[origin: WO2020182270A1] In the prior art, side channel blowers comprise: an electric motor (10) having a drive shaft (22); an impeller (20) which is secured on the drive shaft (22); and a blower head (18) having a flow channel (44) that has a first side channel (32), which is located axially opposite a first row (34) of impeller blades (36) of the impeller (20), and has a second side channel (40), which is located axially opposite a second row (42) of impeller blades (36) of the impeller (20), and the blower head (18) has a first housing part (12), in which the first side channel (32) is formed and which axially delimits at least one chamber (11) in which the electric motor (10) is received, and has a second housing part (16), which is secured to the first housing part (12) and in which the second side channel (40) is formed and which has an inlet (50) and an outlet channel (52). In order to improve efficiency and to simplify assembly, the invention proposes that a supporting surface (58) of the first housing part (12), to which the second housing part (16) is secured, is axially closer to the electric motor (10) than a base (53) of the first side channel (32) directly upstream of the outlet channel (52), and that the outlet channel (52) extends from the second housing part (16) tangentially towards the flow channel (44) directly upstream of the outlet channel (52) and has a cross-section that corresponds at least to the cross-section of the flow channel (44) directly upstream of the outlet channel (52) in the blower head (18).

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