

Title (en)

HIGH-PRESSURE RADIAL FAN COMPRISING A SEALING ARRANGEMENT ARRANGED IN AN INLET OPENING

Title (de)

HOCHDRUCKRADIALVENTILATOR UMFASSEND EINE IN EINER EINLASSÖFFNUNG ANGEORDNETE DICHTUNGSANORDNUNG

Title (fr)

VENTILATEUR RADIALE HAUTE PRESSION COMPRENANT UN AGENCEMENT D'ÉTANCHÉITÉ AGENCÉE DANS UNE OUVERTURE D'ENTRÉE

Publication

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Application

**EP 19813773 A 20191129**

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Abstract (en)

[origin: WO2020156703A1] The invention relates to a high-pressure radial fan of this kind for the pressure-increasing conveyance of a compressible fluid, said high-pressure radial fan having: a spiral housing, which has an inlet opening extending through a housing wall for introducing the fluid and an outlet opening for discharging the fluid; and an impeller wheel, which is arranged in the spiral housing to rotate about an axial axis of rotation and has a blading formed from a plurality of rotor blades, the blading causing an axial intake of the fluid through the inlet opening and a radially and/or tangentially deflected outflow of the fluid through the outlet opening and thus a pressure-increasing conveyance of the fluid from a suction side to a pressure side when the impeller wheel rotates; and a sealing arrangement, which is formed between the spiral housing and the impeller wheel and is provided to minimise a pressure loss between the pressure side and the suction side. According to the invention, the sealing arrangement has a contact sealing arrangement arranged in the region of the inlet opening, said sealing arrangement sealing an annular gap formed between an edge of the inlet opening and the impeller wheel and having a sealing surface arranged at the impeller wheel and at least one sealing element contacting the sealing surface, the sealing element being releasably fastened to an external side of the housing wall. The invention also relates to the use in a high-pressure radial fan.

IPC 8 full level

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Citation (search report)

See references of WO 2020156703A1

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