

Title (en)  
ROTARY MACHINE

Title (de)  
DREHMASCHINE

Title (fr)  
MACHINE ROTATIVE

Publication  
**EP 3578755 C0 20230607 (EN)**

Application  
**EP 18382387 A 20180604**

Priority  
EP 18382387 A 20180604

Abstract (en)  
[origin: EP3578755A1] The rotary machine comprises a pump chamber (1) an electric motor (2) at least one inlet port (5) for sucking external air, the inlet port being in fluid communication with at least an inlet hole (15) of the pump chamber (1), at least one outlet port (6) in fluid communication with an outside zone of the rotary machine for discharging compressed air exiting the pump chamber (1) through at least one outlet hole (16) of the pump chamber (1), a noise reduction element (7) comprising at least one damping conduct (71) intended to reduce the sound pressure level of the compressed air, an intermediate chamber (4) between the base of the pump chamber (1) and the motor (2), the inlet port (5) and the outlet port (6) being connected to this intermediate chamber (4). It also comprises an intermediate conduct (51) housed at least partially in the intermediate chamber (4) for communicating the inlet port (5) with the at least one inlet hole (15) of the pump chamber, the intermediate conduct (4) leaving a free space (410) in the intermediate chamber (4) and the noise reduction element (7) being placed at least partially within a part of this free space (410). The at least one outlet hole (16) opens into this free space (410) of the intermediate chamber (4) such that the compressed air exiting the pump chamber (1) through the outlet hole enters the damping conduct (71) of the noise reduction element (7).

IPC 8 full level  
**F01C 21/10** (2006.01); **F04C 18/344** (2006.01); **F04C 25/02** (2006.01); **F04C 29/06** (2006.01); **F04C 29/12** (2006.01)

CPC (source: CN EP)  
**F01C 21/10** (2013.01 - EP); **F04C 18/344** (2013.01 - EP); **F04C 18/3441** (2013.01 - CN); **F04C 29/065** (2013.01 - CN EP);  
**F04C 29/068** (2013.01 - EP); **F04C 29/12** (2013.01 - CN EP); **F04C 2220/10** (2013.01 - EP); **F04C 2270/13** (2013.01 - EP)

Designated contracting state (EPC)  
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Participating member state (EPC – UP)  
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

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**EP 3578755 A1 20191211**; **EP 3578755 B1 20230607**; **EP 3578755 C0 20230607**; CN 110552882 A 20191210; CN 110552882 B 20230331;  
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