

Title (en)
CENTRIFUGAL FAN

Title (de)
ZENTRIFUGALGEBLÄSE

Title (fr)
VENTILATEUR CENTRIFUGE

Publication
EP 3567259 A4 20200819 (EN)

Application
EP 17890377 A 20171227

Priority
• JP 2017000243 A 20170104
• JP 2017046893 W 20171227

Abstract (en)
[origin: EP3567259A1] [Problem] To provide a single-suction centrifugal blower for a vehicle that suppresses displacement of a separation cylinder relative to its peripheral components caused by vibrations and the like without impairing performance.[Solving Means] Multiple ribs (40A, 40B, 40C) designed to bridge a gap between a separation cylinder (14) and a scroll housing (17) are arranged in a suction port (22). Each of the ribs has an inner end (41), an outer end (42), a front edge (43), and a rear edge (44). The inner end is connected to the separation cylinder, the outer end is connected to the scroll housing, the rear edge extends toward an inside space of the scroll housing in a region between the separation cylinder and the scroll housing, and the front edge extends to a side opposite to the rear edge in the region between the separation cylinder and the scroll housing. Each of the ribs is inclined with respect to a meridional section of a centrifugal blower in such a way as to satisfy at least one of: a condition where the inner end is located at an angular position ahead of the outer end in a rotation direction of an impeller; and a condition where the rear edge is located at an angular position ahead of the front edge in the rotation direction of the impeller.

IPC 8 full level
F04D 29/42 (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP)
F04D 29/4213 (2013.01); **F04D 29/4246** (2013.01)

Citation (search report)
• [YD] US 2016355069 A1 20161208 - VINCENT PHILIPPE [FR]
• [Y] JP H0558897 U 19930803
• [A] US 6030286 A 20000229 - KAMEOKA TERUHIKO [JP], et al
• [A] WO 2016133014 A1 20160825 - NIPPON SOKEN [JP], et al
• See references of WO 2018128143A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3567259 A1 20191113; **EP 3567259 A4 20200819**; CN 110168231 A 20190823; CN 110168231 B 20210622; JP 2018109383 A 20180712; JP 6768531 B2 20201014; WO 2018128143 A1 20180712

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EP 17890377 A 20171227; CN 201780082002 A 20171227; JP 2017000243 A 20170104; JP 2017046893 W 20171227