

Title (en)
VENTILATION DEVICE AND VEHICLE WITH A VENTILATION DEVICE

Title (de)
LÜFTEREINRICHTUNG UND FAHRZEUG MIT EINER LÜFTEREINRICHTUNG

Title (fr)
DISPOSITIF DE VENTILATION ET VÉHICULE POURVU D'UN DISPOSITIF DE VENTILATION

Publication
EP 2926013 B1 20190109 (DE)

Application
EP 13802533 A 20131115

Priority
• DE 102012023454 A 20121130
• EP 2013003443 W 20131115

Abstract (en)
[origin: WO2014082711A2] The invention relates to a ventilation device with a holder, particularly a ventilation frame (3, 3', 3'') which has a substantially circular continuous opening (4, 4', 4'', 4''') for receiving a ventilation wheel (5, 5', 5'', 5''') rotating about the central axis (10) thereof, wherein the opening (4, 4', 4'', 4''') is bordered by a edge face (15, 15', 15'', 15''', 15''''', 40, 40', 40'', 40''') running substantially cylinder-symmetrically about the central axis (10), and wherein, at the edge face (15, 15', 15'', 15''', 15''''', 40, 40', 40'', 40'''), in two separate, diametrically opposed peripheral sections (17, 17', 17'', 18, 18', 18'') the radius is at least partly enlarged in comparison to the cylinder-symmetrical form in the remaining peripheral sections, and/or a circular projection (30, 36, 38) of the edge face (15, 15', 15'', 15''', 15''''', 40, 40', 40'', 40'''), which projection projects radially inwards, is axially offset away from the space provided for the ventilation wheel (5, 5', 5'', 5'''). Because of the corresponding shaping of the edge face (15, 15', 15'', 15''', 15''''', 40, 40', 40'', 40''') of the opening (4, 4', 4'', 4''') contact and/or development of noise between the ventilation wheel and the edge of the opening (4, 4', 4'', 4''') is also prevented in the ventilation frame (3, 3', 3'') in the event of a yawing of a ventilation wheel used when pivoting the ventilation device.

IPC 8 full level
F04D 29/16 (2006.01); **F04D 29/52** (2006.01); **F04D 29/54** (2006.01)

CPC (source: CN EP US)
F01P 5/06 (2013.01 - US); **F04D 19/002** (2013.01 - US); **F04D 29/164** (2013.01 - CN EP US); **F04D 29/325** (2013.01 - US);
F04D 29/326 (2013.01 - US); **F04D 29/522** (2013.01 - US); **F04D 29/526** (2013.01 - CN EP US); **F04D 29/545** (2013.01 - CN EP US);
F04D 29/547 (2013.01 - US); **F04D 29/646** (2013.01 - US); **F01P 2070/50** (2013.01 - CN EP US)

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014082711 A2 20140605; WO 2014082711 A3 20140807; BR 112015012367 A2 20170711; CN 104822947 A 20150805;
CN 104822947 B 20180629; DE 102012023454 A1 20140605; EP 2926013 A2 20151007; EP 2926013 B1 20190109; ES 2716821 T3 20190617;
KR 101858084 B1 20180515; KR 20150091143 A 20150807; US 2015260200 A1 20150917; US 9850914 B2 20171226

DOCDB simple family (application)
EP 2013003443 W 20131115; BR 112015012367 A 20131115; CN 201380062576 A 20131115; DE 102012023454 A 20121130;
EP 13802533 A 20131115; ES 13802533 T 20131115; KR 20157017419 A 20131115; US 201514726757 A 20150601