

Title (en)

MIXER AND ASSEMBLY FOR AIR-CONDITIONING A RAIL VEHICLE

Title (de)

MISCHER SOWIE ANORDNUNG ZUR KLIMATISIERUNG EINES SCHIENENFAHRZEUGS

Title (fr)

MÉLANGEUR ET SYSTÈME DE CLIMATISATION D'UN VÉHICULE FERROVIAIRE

Publication

EP 3749562 A1 20201216 (DE)

Application

EP 19707297 A 20190214

Priority

- DE 102018203986 A 20180315
- EP 2019053724 W 20190214

Abstract (en)

[origin: WO2019174848A1] The invention relates to a mixer, which forms the core part of an air-conditioning assembly of a rail vehicle, and to the corresponding air-conditioning assembly. The mixer (M11) has two inlets (E11, E12), an outlet (A11), and a central region (B11) which is arranged between the two inlets (E11, E12) and the outlet (A11). The first inlet (E11) is connected to a fresh air supply, and the second inlet (E12) is connected to a circulating air supply such that fresh air (FL) and circulating air (UL) reach the central region (B11). The circulating air (UL) is mixed with the fresh air (FL) in the central region (B11), and supply air (ZL) is thus obtained. The central region (B11) of the mixer (M11) is connected to the fresh air inlet (E11) via an opening (OF11) such that the opening (OF11) forms a transition region (UB11) between the fresh air inlet (E11) and the central region (B11). The transition region (UB11) contains a profiled section (PR11) with a wing-shaped cross-section which is designed and arranged in the transition region (UB11) such that the supplied fresh air (FL) generates negative pressure along the transition region (UB11), and the circulating air (UL) is suctioned into the central region (B11) of the mixer (M11) in a reinforced manner via the negative pressure.

IPC 8 full level

B61D 27/00 (2006.01)

CPC (source: EP RU US)

B61D 27/00 (2013.01 - RU); **B61D 27/0018** (2013.01 - EP US)

Citation (search report)

See references of WO 2019174848A1

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 2019174848 A1 20190919; CN 111867915 A 20201030; CN 111867915 B 20230120; EP 3749562 A1 20201216; EP 3749562 B1 20220330; ES 2910408 T3 20220512; RU 2742916 C1 20210211; US 11414103 B2 20220816; US 2020406939 A1 20201231

DOCDB simple family (application)

EP 2019053724 W 20190214; CN 201980019103 A 20190214; EP 19707297 A 20190214; ES 19707297 T 20190214; RU 2020126097 A 20190214; US 201916980925 A 20190214