

Title (en)

RAILWAY TRAIN AND FRESH AIR INLET SNOW-MELTING DEVICE OF TRAIN

Title (de)

EISENBAHNZUG UND FRISCHLUFTEINLASS-SCHNEESCHMELZVORRICHTUNG EINES ZUGES

Title (fr)

TRAIN DE CHEMIN DE FER ET DISPOSITIF DE FONTE DE NEIGE PAR ENTRÉE D'AIR FRAIS DE TRAIN

Publication

**EP 3895953 A4 20220907 (EN)**

Application

**EP 19895761 A 20191126**

Priority

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- CN 201822067450 U 20181210
- CN 2019120993 W 20191126

Abstract (en)

[origin: EP3895953A1] Provided is a fresh air inlet snow-melting device of a train, the device comprising an air inlet grating (1), a rainwater separator (2), and a heating device. The rainwater separator (2) is arranged behind the air inlet grating, and is provided with a labyrinth-type air inlet channel and water drainage holes (206). The side, close to the air inlet grating, in the rainwater separator is provided with the heating device. When accumulated snow is formed at an air inlet of the air inlet grating, the heating device can be started to melt the accumulated snow, meanwhile, the labyrinth-type air inlet channel of the rainwater separator can separate water carried in inlet air due to the melting snow and drain the water from the water drainage holes (206). The device eliminates air inlet resistance, ensures the inlet air volume of an air conditioner, also prevents snow water from entering an air-conditioning system, and ensures the performance of the air-conditioning system of a train under the working conditions of snowstorm weather and low temperatures. Further provided is a railway train provided with the fresh air inlet snow-melting device.

IPC 8 full level

**B61D 27/00** (2006.01)

CPC (source: EP)

**B61D 27/0018** (2013.01)

Citation (search report)

- [A] CN 203888576 U 20141022 - CSR QINGDAO SIFANG CO LTD
- [I] CN 205652133 U 20161019 - SHANGHAI FEITEYA AIR FILTRATION CO LTD
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- [A] CH 713147 A2 20180531 - GK GRUENENFELDER AG [CH]
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- See references of WO 2020119451A1

Designated contracting state (EPC)

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