

Title (en)

COOLING SYSTEM FOR AN ELECTRIC POWER CONVERSION DEVICE OF A RAILROAD VEHICLE

Title (de)

KÜHLSYSTEM FÜR EINE ELEKTRISCHE ENERGIEUMWANDLUNGSVORRICHTUNG EINES SCHIENENFAHRZEUGS

Title (fr)

SYSTÈME DE REFROIDISSEMENT POUR DISPOSITIF DE CONVERSION D'ÉNERGIE ÉLECTRIQUE DE VÉHICULE FERROVIAIRE

Publication

EP 3703992 A1 20200909 (EN)

Application

EP 18795596 A 20181030

Priority

- EP 17199253 A 20171030
- EP 2018079685 W 20181030

Abstract (en)

[origin: WO2019086441A1] A railroad vehicle (1) comprises an electric power conversion device (10), a cooling circuit (15) comprising a fluid, which is thermally connected to the electric power-conversion device (10) and comprises at least one heat-exchanger (20, 21) for dissipating thermal energy from the electric power-conversion device (10) to surrounding air, wherein at least one side wall (30, 31) of the railroad vehicle (1) comprises at least one opening (40, 41, 45, 46, 47, 48), and wherein the at least one heat exchanger (20, 21) is arranged to be cooled by an air flow through the at least one opening (40, 41, 45, 46, 47, 48) caused by a movement of the railroad vehicle (1), wherein the at least one heat exchanger (20, 21) and the at least one opening (40, 41, 45, 46, 47, 48) are located at a roof level of the railroad vehicle (1). Further, a respective cooling method for an electric power conversion device located at a roof level of a railroad vehicle is provided.

IPC 8 full level

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CPC (source: EP)

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