

Title (en)

COOLANT CIRCUIT FOR A VEHICLE, ADAPTED TO FAST CHARGING OF A STORAGE DEVICE

Title (de)

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Title (fr)

CIRCUIT DE FLUIDE RÉFRIGÉRANT POUR VÉHICULE ADAPTÉ A UNE CHARGE RAPIDE D'UN DISPOSITIF DE STOCKAGE

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Application

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Priority

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Abstract (en)

[origin: WO2021123537A1] The present invention relates to a circuit (1) for a vehicle configured to be traversed by a coolant (FR). The circuit (1) comprises a main branch (2) comprising a main heat exchanger (3) comprising at least one inlet (100; 101, 102) for coolant (FR). The circuit (1) comprises a first branch (4) and a second branch (5) that extend between a point of divergence (6) and a point of convergence (7). The first branch (4) comprises a first compression device (9), a first expansion member (8) and a first heat exchanger (10) configured to thermally treat an electrical storage device (11) of the vehicle. The second branch (5) comprises a second compression device (13), a second expansion member (12) and a second heat exchanger (14) configured to thermally treat a passenger compartment of the vehicle. The circuit (1) comprises a high-pressure line (200) that comprises a first portion (201) extending between an outlet (31) of the first compression device and the inlet (100; 101, 102). The high-pressure line (200) comprises a second portion (202) extending between an outlet (38) of the second compression device and the inlet (100; 101, 102). The first portion (201) is of a first length (X1) and the second portion (202) is of a second length (X2). A first distance (Y1) separates the outlet (31) of the first compression device from the point of convergence (7) and a second distance (Y2) separates the outlet (38) of the second compression device from the point of convergence (7). The first distance (Y1) is more than half of the first length (X1) and the second distance (Y2) is more than half of the second length (X2).

IPC 8 full level

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