

Title (en)

SYSTEM AND METHOD FOR AIR CONDITIONING AN AIRCRAFT CABIN WITH IMPROVED COOLING CAPACITY

Title (de)

SYSTEM UND VERFAHREN ZUR KLIMATISIERUNG EINER FLUGZEUGKABINE MIT VERBESSERTER KÜHLLLEISTUNG

Title (fr)

SYSTÈME ET PROCÉDÉ DE CLIMATISATION D'UNE CABINE D'AÉRONEF PERMETTANT D'OBTENIR UNE PUISSANCE DE REFROIDISSEMENT AMÉLIORÉE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2010049060A1] A system (10) for air conditioning an aircraft cabin (12) comprises an air-conditioning unit (14), which is connected to a central mixer (16) to supply air at a desired low temperature to the central mixer (16). A first recirculation system (18) is equipped to remove exhaust air from a first aircraft cabin area (12a) and is connected to the central mixer (16) in order to conduct the exhaust air from the first aircraft cabin area (12a) into the central mixer (16). A second recirculation system (24) is equipped to remove exhaust air from a second aircraft cabin area (12b) and is connected to a local mixer (20, 22) to conduct the exhaust air from the second aircraft cabin area (12b) into the local mixer (20, 22). The local mixer (20, 22) is connected to the central mixer (16) in order to supply mixed air from the central mixer (16) to the local mixer (20, 22). The second recirculation system (24) comprises a cooling unit (28), which is arranged upstream of the local mixer (20, 22) in the second recirculation system (24), based on the direction of flow of the recirculation air removed from the second aircraft cabin area (12b), and is equipped to cool the recirculation air removed from the second aircraft cabin area (12b) to a desired temperature.

IPC 8 full level

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CPC (source: EP US)

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