

Title (en)

SYSTEM COMPRISING A HYBRID AIR CONDITIONING UNIT FOR AN AIRCRAFT CABIN

Title (de)

SYSTEM MIT EINER HYBRIDEN KLIMAAANLAGE FÜR EINE FLUGZEUGKABINE

Title (fr)

SYSTÈME COMPRENANT UN GROUPE DE CONDITIONNEMENT D'AIR HYBRIDE POUR CABINE D'AÉRONEF

Publication

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Application

EP 17711709 A 20170224

Priority

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Abstract (en)

[origin: WO2017149228A1] The present invention proposes a system comprising an air conditioning unit using an electric motor coupled to the rotary shaft of an air cycle machine (ACM) so that the rotation of the shaft of the ACM is accelerated during phases of flight in which the aircraft engine speed is low, this being when a pressure and flow rate of the air entering the air conditioning unit is below a predetermined threshold. Through this mechanism, the compressor can increase the compression ratio of the air handled by the ACM when the pressure or flow rate of the incoming air is not high enough to supply the air conditioning unit. The proposed system appears to be less complex and more lightweight than the system of the prior art, because it is possible to air-cool the power electronics and a single compressor is used instead of two.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2017149228A1

Cited by

US11697505B2; US11732639B2; US11486472B2; US12066083B2; US11628942B2; US11535392B2; US12071256B2

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