Title (en)

HEATING, VENTILATING AND AIR CONDITIONING SYSTEM FOR ELECTRIC VEHICLE OR HYBRID ELECTRIC VEHICLE

Title (de)

HEIZUNGS-, LÜFTUNGS- UND KLIMAANLAGENSYSTEM FÜR EIN ELEKTROFAHRZEUG ODER EIN HYBRIDELEKTROFAHRZEUG

Title (fr)

SYSTÈME DE CHAUFFAGE, VENTILATION ET CLIMATISATION D'AIR POUR UN VÉHICULE ÉLECTRIQUE OU UN VÉHICULE ÉLECTRIQUE HYBRIDE

Publication

EP 2652834 A4 20171115 (EN)

Application

EP 11835640 A 20111027

Priority

- CN 201010524780 A 20101029
- CN 2011081433 W 20111027

Abstract (en)

[origin: WO2012055367A1] A Heating, Ventilating and Air Conditioning (HVAC) system for an electric vehicle or hybrid electric vehicle comprises a casing (110), a blower (120) disposed within the casing (110) and a battery air duct (160) disposed outside the casing (110). The casing (110) includes a first air inlet (111) provided upstream of the blower (120) and a first air outlet (112) provided downstream of an evaporator (130). The battery air duct (160) is connected to the first air outlet (112). The battery air duct (160) has an battery air inlet (161) communicating with the interior of a cabin (190) and an air intake control valve which controls the air fed to the battery with options: (a) feeding cooled air from the HVAC system through the first air outlet (112); (b) feeding air from the cabin (190) through the battery air inlet (161); (c) feeding air from the combination of (a) and (b). The air intake control valve comprises a first flap (170, 270) which is movable between two extreme positions. The first flap (170, 270) closes the first air outlet (112) in the first extreme position and closes the battery air inlet (161) in the second extreme position. The structure of the HVAC system is optimized, and the occupied space of the system and the manufacture cost are decreased.

IPC 8 full level

B60H 1/32 (2006.01); **B60H 1/00** (2006.01); **B60L 1/00** (2006.01); **B60L 1/06** (2006.01); **B60L 3/00** (2006.01); **B60L 11/18** (2006.01); **H01M 10/613** (2014.01); **H01M 10/625** (2014.01); **H01M 10/6563** (2014.01); **H01M 10/663** (2014.01)

CPC (source: EP US)

B60H 1/00028 (2013.01 - EP); **B60H 1/00278** (2013.01 - EP US); **B60L 1/003** (2013.01 - EP); **B60L 1/06** (2013.01 - EP); **B60L 58/26** (2019.01 - EP); **H01M 10/613** (2015.04 - EP); **H01M 10/625** (2015.04 - EP); **H01M 10/6563** (2015.04 - EP); **H01M 10/663** (2015.04 - EP); B60H 2001/00178 (2013.01 - EP); B60H 2001/003 (2013.01 - EP); B60L 2240/34 (2013.01 - EP); B60L 2240/545 (2013.01 - EP); Y02E 60/10 (2013.01 - EP); Y02T 10/70 (2013.01 - EP); Y02T 90/16 (2013.01 - EP)

Citation (search report)

- [IY] US 2009078400 A1 20090326 - TAMURA HIROSHI [JP], et al
- [IY] US 2009133859 A1 20090528 - SUZUKI YUSUKE [JP], et al
- See references of WO 2012055367A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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