

Title (en)

Procedure for regulating an air flow in an air conditioning system and air conditioning system therefor

Title (de)

Verfahren zur Luftstromregulierung einer Klimaanlage und Klimaanlage dafür

Title (fr)

Procédé de réglage d'un flux d'air d'un système de conditionnement d'air et système de conditionnement d'air associé

Publication

**EP 2557368 B2 20220223 (EN)**

Application

**EP 12179782 A 20120809**

Priority

IT MI20111538 A 20110812

Abstract (en)

[origin: EP2557368A1] A procedure for regulating an air flow in an air conditioning plant, with an air conditioning unit (2) suitable for generating a flow of air, a plurality of diffuser elements (4) for diffusing the conditioned air into the ambient, a transport channel (13) for transferring the air to be diffused, a flow interrupting element (20) mobile between a first operating condition in which it enables passage of fluid towards the diffuser elements (4) and a second operating condition in which it substantially intercepts the air, the flow interrupting element (20) being interposed between a first portion of the plant directly in fluid connection with the at least an air conditioning unit (2) and a second portion of the plant and intercepting the air flow coming from the at least a treatment unit (2) and directed towards the second portion of the plant, a pressure sensor (22) for detecting an operating pressure internally of the plant, the procedure comprising the following steps of activating the conditioning unit (2) such as to generate an air flow, detecting, with the pressure sensor (22), the pressure generated internally of the plant, moving the flow interrupting element (20) into an operating position comprised between the first and the second operating condition as a function of the pressure detection performed by the sensor (22) for regulating the air flow internally of the plant.

IPC 8 full level

**F24F 3/044** (2006.01); **F24F 11/00** (2018.01); **F24F 13/02** (2006.01); **F24F 13/06** (2006.01); **F24F 13/068** (2006.01)

CPC (source: EP US)

**F24F 3/044** (2013.01 - EP); **F24F 11/30** (2017.12 - EP); **F24F 11/745** (2017.12 - EP US); **F24F 13/0236** (2013.01 - EP); **F24F 13/068** (2013.01 - EP); **F24F 2003/0446** (2013.01 - EP); **F24F 2013/0608** (2013.01 - EP); **F24F 2110/00** (2017.12 - EP); **F24F 2110/40** (2017.12 - EP); **F24F 2140/40** (2017.12 - EP)

Citation (opposition)

Opponent :

- US 2011031322 A1 20110210 - ZOU SHAZHOU [US], et al
- WO 2010010230 A2 20100128 - HALTON OY [FI], et al
- Airzone Catalog (2009)

Cited by

EP4008978A1; CN113606765A; EP4269900A1; FR3028012A1; RU2711269C2; EP3343119A1; IT201600127985A1; EP3401614A3; EP3926245A1; FR3101937A1; US10001151B2; WO2021255338A1; WO2016137952A1; WO2016066979A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2557368 A1 20130213**; **EP 2557368 B1 20170927**; **EP 2557368 B2 20220223**; EP 3293462 A1 20180314; EP 3293462 B1 20210106; ES 2862306 T3 20211007; HR P20171943 T1 20180223; HR P20171943 T4 20220624; IT MI20111538 A1 20130213; SI 2557368 T1 20180430; SI 2557368 T2 20220729; SI 3293462 T1 20210730

DOCDB simple family (application)

**EP 12179782 A 20120809**; EP 17193279 A 20120809; ES 17193279 T 20120809; HR P20171943 T 20120809; IT MI20111538 A 20110812; SI 201231165 T 20120809; SI 201231903 T 20120809