

Title (en)

TOP AIR-OUTLET DEVICE, AIR CONDITIONER, AND MOTION CONTROL METHOD OF THE TOP AIR-OUTLET DEVICE

Title (de)

OBERE LUFTAUSLASSVORRICHTUNG, KLIMAAANLAGE UND BEWEGUNGSSTEUERUNGSVERFAHREN DER OBEREN LUFTAUSLASSVORRICHTUNG

Title (fr)

DISPOSITIF DE SORTIE D'AIR SUPÉRIEURE, CLIMATISEUR ET PROCÉDÉ DE COMMANDE DE MOUVEMENT DU DISPOSITIF DE SORTIE D'AIR SUPÉRIEURE

Publication

EP 3569946 B1 20230614 (EN)

Application

EP 17891185 A 20171019

Priority

- CN 201710018070 A 20170111
- CN 2017106877 W 20171019

Abstract (en)

[origin: EP3569946A1] Disclosed is a top air-outlet device, including a top cover assembly (100), a top air-outlet assembly (200), a detection mechanism (300), an adjustment mechanism (400) and a controller; the top air-outlet assembly (200) is capable of ascending and descending with respect to the top cover assembly (100), the controller is configured to control an ascending and descending motion of the top air-outlet assembly (200) and the top cover assembly (100); the adjustment mechanism (400) and the detection mechanism (300) are respectively disposed on the top air-outlet assembly (200) and the top cover assembly (100); the adjustment mechanism (400) has expanding-retracting elasticity; in the process of the ascending and descending motion of the top air-outlet assembly (200) with respect to the top cover assembly (100), when the adjustment mechanism (400) touches the detection mechanism (300), the detection mechanism (300) sends a detection signal to the controller, to make the controller control the top air-outlet assembly (200) to continue moving within an elastic expanding-retracting range of the adjustment mechanism (400). The top air-outlet device increases a motion stroke of the top air-outlet assembly within the expanding-retracting range of the adjustment mechanism through the adjustment mechanism, such that the top air-outlet assembly can be completely closed with the top cover assembly. An air conditioner and a motion control method for the top air-outlet device are further provided.

IPC 8 full level

F24F 13/10 (2006.01); **F24F 1/0011** (2019.01); **F24F 1/005** (2019.01); **F24F 11/00** (2018.01); **F24F 13/20** (2006.01)

CPC (source: CN EP)

F24F 1/0011 (2013.01 - EP); **F24F 1/005** (2019.01 - EP); **F24F 11/30** (2017.12 - CN EP); **F24F 11/70** (2017.12 - CN EP); **F24F 13/10** (2013.01 - CN EP); **F24F 13/20** (2013.01 - CN EP); **F24F 2110/00** (2017.12 - CN EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3569946 A1 20191120; **EP 3569946 A4 20200108**; **EP 3569946 B1 20230614**; CN 106642618 A 20170510; CN 106642618 B 20220429; WO 2018129974 A1 20180719

DOCDB simple family (application)

EP 17891185 A 20171019; CN 201710018070 A 20170111; CN 2017106877 W 20171019