

Title (en)
CABINET AIR CONDITIONER AND CONTROL METHOD

Title (de)
SCHRANKKLIMAANLAGE UND STEUERUNGSVERFAHREN

Title (fr)
CLIMATISEUR ARMOIRE ET PROCÉDÉ DE COMMANDE

Publication
EP 4008971 A1 20220608 (EN)

Application
EP 20849279 A 20200609

Priority
• CN 201910713842 A 20190802
• CN 2020095224 W 20200609

Abstract (en)
Some embodiments of the present invention provide an air conditioner cabinet and a control method. The air conditioner cabinet includes a housing (10), wherein the housing (10) is provided with an upper air port (11) and a lower air port (12); a heat exchanger (20), wherein the heat exchanger (20) is disposed in the housing (10) and is located between the upper air port (11) and the lower air port (12); a mixed flow fan portion (30), wherein the mixed flow fan portion (30) is disposed in the housing (10); and a regulating mechanism (40), wherein the regulating mechanism (40) is disposed in the housing (10), the regulating mechanism (40) is located between the mixed flow fan portion (30) and the heat exchanger (20), the regulating mechanism (40) has a necking position where the regulating mechanism contracts toward the axis of the housing (10), the regulating mechanism (40) has a flaring position where the regulating mechanism gradually expands away from the axis of the housing (10), and when the regulating mechanism (40) is located at the necking position, the mixed flow fan portion (30) can suck an external airflow into the housing (10) from the upper air port (11), so as to perform heat exchange with the heat exchanger (20), and then discharges the external airflow from the housing (10) by the lower air port (12). The temperature difference of the indoor temperature in the longitudinal direction can be very small, and the utilization rate of the energy generated by the air conditioner cabinet can be effectively improved.

IPC 8 full level
F24F 1/0014 (2019.01); **F24F 1/0018** (2019.01); **F24F 1/0063** (2019.01); **F24F 11/65** (2018.01); **F24F 11/67** (2018.01); **F24F 13/10** (2006.01); **F24F 13/22** (2006.01); **F24F 13/30** (2006.01)

CPC (source: CN EP)
F24F 1/0014 (2013.01 - CN EP); **F24F 1/0018** (2013.01 - CN EP); **F24F 1/0063** (2019.01 - CN EP); **F24F 11/65** (2017.12 - CN); **F24F 11/67** (2017.12 - CN EP); **F24F 13/10** (2013.01 - CN EP); **F24F 13/20** (2013.01 - EP); **F24F 13/222** (2013.01 - CN); **F24F 13/30** (2013.01 - CN EP); **F24F 13/22** (2013.01 - EP); **F24F 2007/005** (2013.01 - EP); **F24F 2013/205** (2013.01 - 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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 4008971 A1 20220608; **EP 4008971 A4 20220907**; CN 112303728 A 20210202; WO 2021022897 A1 20210211

DOCDB simple family (application)
EP 20849279 A 20200609; CN 201910713842 A 20190802; CN 2020095224 W 20200609