

Title (en)

In-ceiling type air conditioner having controller for upward and downward motion of elevating panel

Title (de)

Klimagerät für Deckenmontage mit Steuerung der Auf- und Abbewegung der Hebevorrichtung

Title (fr)

Dispositif de climatisation pour plafond avec commande de mouvement vers le haut et vers le bas du panneau élévateur

Publication

EP 0823598 A3 20010411 (EN)

Application

EP 97113236 A 19970731

Priority

JP 22596296 A 19960808

Abstract (en)

[origin: EP0823598A2] An in-ceiling type air conditioner (50) including an unit body (2) which contains a heat exchanger (16) and an air blower (10) and is mounted in the ceiling (1), a decorative panel (7) provided on the ceiling face, an elevating panel with an air filter (24) which is upwardly and downwardly moved by an elevating motor (140), a driver circuit for supplying an operating current to the elevating motor to rotate the elevating motor (140) forwardly and backwardly, a controller (160) for outputting a control signal to the driver circuit and controlling the driver circuit (305) on the basis of the control signal, a consumption current detector for detecting the consumption current (307) of the elevating motor (140) at all times to output a detection result to the controller (160), and a timer (309) for counting a predetermined time and outputting the count result to the controller (160). When the consumption current detected by the consumption current detector exceeds a predetermined value during the upward or downward motion of the elevating panel, the controller outputs an operation stop instruction to the driver circuit to stop the rotation of the elevating motor (140) and thus stop the elevating panel.

IPC 1-7

F24F 11/00; **F24F 1/00**

IPC 8 full level

F24F 1/00 (2006.01); **F24F 11/00** (2006.01); **F24F 13/20** (2006.01)

CPC (source: EP KR US)

F24F 1/00 (2013.01 - KR); **F24F 11/30** (2017.12 - EP); **F24F 13/084** (2013.01 - EP KR US); **F24F 13/20** (2013.01 - EP); **F24F 2140/60** (2017.12 - EP); **F24F 2221/14** (2013.01 - EP)

Citation (search report)

- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 239 (M - 1601) 9 May 1994 (1994-05-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 492 (M - 1673) 14 September 1994 (1994-09-14)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 02 31 March 1995 (1995-03-31)

Cited by

CN101929710A; CN108332287A

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0823598 A2 19980211; **EP 0823598 A3 20010411**; **EP 0823598 B1 20031119**; CN 1100237 C 20030129; CN 1177707 A 19980401; DE 69726228 D1 20031224; DE 69726228 T2 20040902; ES 2212017 T3 20040716; JP 3552851 B2 20040811; JP H1054578 A 19980224; KR 100458541 B1 20050613; KR 19980018467 A 19980605; PT 823598 E 20040430

DOCDB simple family (application)

EP 97113236 A 19970731; CN 97118568 A 19970808; DE 69726228 T 19970731; ES 97113236 T 19970731; JP 22596296 A 19960808; KR 19970037739 A 19970807; PT 97113236 T 19970731