

Title (en)
Ceiling-embedded-type air conditioning apparatus

Title (de)
In die Decke eingebaute Klimaanlagenvorrichtung

Title (fr)
Climatiseur d'air encastré dans le plafond

Publication
EP 2390590 A3 20140604 (EN)

Application
EP 11177128 A 20060203

Priority

- EP 10009996 A 20060203
- EP 06712972 A 20060203
- JP 2005049354 A 20050224
- JP 2005334856 A 20051118

Abstract (en)
[origin: EP1873461A1] To obtain a highly reliable and low-noise ceiling-embedded-type air conditioning apparatus capable of preventing damaging of a motor by improving the motor cooling efficiency. On the motor side of a downward-protruding hub 3c covering the motor 4 and fixing the rotary shaft 4a of the motor 4 in place, an air guiding cover 18 for forming a motor-side air passage 3f between the air guiding cover and the motor 4 and for guiding air flown into the motor-side air passage 3f from a gap formed between a chassis top panel 1b and a main plate 3b toward the motor 4. The air guiding cover 18 includes a circumferential surface portion 18c extending downward from the main plate 3b side. The air guiding cover 18 is formed so that the height position of the lower edge opening 18b of the circumferential surface portion 18c is lower than the height of a lower edge surface 4b of the motor 4. The hub 3c includes a plurality of openings 3d for letting air flown out from the lower edge opening 18b of the air guiding cover 18 into a gap between the air guiding cover 18 and the hub 3c to flow to a fan inner air passage 3e.

IPC 8 full level
F24F 1/0047 (2019.01); **F04D 25/08** (2006.01); **F24F 1/0059** (2019.01); **F24F 13/24** (2006.01)

CPC (source: EP US)
F04D 25/082 (2013.01 - EP); **F04D 29/5806** (2013.01 - EP); **F24F 1/0033** (2013.01 - EP); **F24F 1/0047** (2019.01 - EP US);
F24F 1/0059 (2013.01 - EP US); **F24F 13/24** (2013.01 - EP); **F24F 2013/0616** (2013.01 - EP)

Citation (search report)

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- [A] JP H06341659 A 19941213 - DAIKIN IND LTD
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Designated contracting state (EPC)
ES GB

DOCDB simple family (publication)
EP 1873461 A1 20080102; EP 1873461 A4 20100714; EP 1873461 B1 20111005; CN 101907325 A 20101208; CN 101907325 B 20120613;
CN 1942716 A 20070404; CN 1942716 B 20110126; EP 2273207 A2 20110112; EP 2273207 A3 20140618; EP 2273207 B1 20170322;
EP 2390590 A2 20111130; EP 2390590 A3 20140604; EP 2390590 B1 20170322; ES 2623606 T3 20170711; ES 2623875 T3 20170712;
JP 2006266664 A 20061005; JP 4684085 B2 20110518; WO 2006090564 A1 20060831

DOCDB simple family (application)
EP 06712972 A 20060203; CN 200680000162 A 20060203; CN 201010271763 A 20060203; EP 10009996 A 20060203;
EP 11177128 A 20060203; ES 10009996 T 20060203; ES 11177128 T 20060203; JP 2005334856 A 20051118; JP 2006301829 W 20060203