SG 9802287-4

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : F25D 17/06, 29/00 — A1

(11) International Publication Number: WO 98/08035

(43) International Publication Date: 26 February 1998 (26.02.98)

(21) International Application Number: PCT/JP97/02702

(22) International Filing Date: 4 August 1997 (04.08.97)

(30) Priority Data:
8/222103 23 August 1996 (23.08.96) JP

(71) Applicant: MATSUSHITA REFRIGERATION COMPANY [JP/JP]; 2-5, Takaidahondori 4-chome, Higashiosaka-shi, Osaka 577 (JP).

(72) Inventors: KOBAYASI, Minoru; 1-3-5, Aoyama, Otsu-shi, Shiga 520-21 (JP). YAMAMOTO, Kouji; 2-6-23, Hirai, Kusatsu-shi, Shiga 525 (JP). UNO, Tadao; 1-5-21, Sinohara-cho, Oumihachiman-shi, Shiga 523 (JP). SASAKI, Masatosi; 21-25, Inoue-cho, Higasinonaka, Yamasina-ku, Kyoto-shi, Kyoto 607 (JP).

(74) Agents: TAKIMOTO, Tomoyuki et al.; Matsushita Electric Industrial Co., Ltd., 1006, Oaza Kadoma, Kadoma-shi, Osaka 571 (JP).

(81) Designated States: CN, KR, SG, VN

Published
With international search report.

10 DEC 1998

(54) Title: REFRIGERATOR

(57) Abstract

To prevent freezing of the temperature sensor (7) by freezing of water if water invades into the food freezer compartment (2), and to assure normal temperature control of the food freezer compartment (2) if food is placed on the convection port of temperature sensor (7). The constitution hence comprises a food freezer compartment (2), a cooler (3) installed at the inner side of the food freezer compartment (2), a blower (4) for blowing cold air cooled by the cooler (3), a duct (5) for distributing the cooled cold air, a thermo-case (6) installed at the bottom of the food freezer compartment (2), a temperature sensor (7) for controlling the temperature of the food freezer compartment (2), being installed in the thermo-case (6), a cold air circulation route (12) communicating with the food freezed compartment (2), being installed through the cooler (3) at the lower side of the thermo-case (6), and a penetration route (15) installed by penetrating through the bottom of the thermo-case (6) and the cold air circulation route (12). Therefore, if water invades into the thermo-case (6), the water is discharged through the penetration route (15), and further the cold air passes through the penetration route (15) to circulate through the compartment (2), cold air circulation route (12), and cooler (3).

