circuit device, or software to be executed by a processor such as a microcomputer and a central processing unit (CPU).

[0025]

In the inside of the housing 1A on the back surface side, there is provided the cooling compartment 10 configured to generate chilled air for cooling the inside of each of the storage compartments and to send the chilled air.

[0026]

[Structure of Cooling Compartment]

Next, the structure of the cooling compartment 10 is described.

As illustrated in Fig. 3, in the cooling compartment 10, there are provided a cooling device 11, the air-sending fan 12 (see Fig. 2), a pre-cooling device 13, and a heater 14. Further, between the cooling compartment 10 and the storage compartments (in particular, the freezer compartment 5), that is, on a front surface side of the cooling compartment 10, an isolation wall 20 for partitioning the cooling compartment 10 and the storage compartments is provided entirely along the side-surfaces direction that is the width direction of the housing 1A.

[0027]

The cooling device 11 is a heat exchanger configured to cool air in the inside of the refrigerator 1. The cooling device 11, of which detailed description is given later, is configured to exchange heat between refrigerant flowing through a refrigerant pipe and air to cool the air. In this example, the air in the inside of the refrigerator 1 flows from the lower side toward the upper side of the cooling device 11.

The air-sending fan 12 is provided above the cooling device 11, and is configured to send the air cooled by the cooling device 11 (hereinafter appropriately referred to as "chilled air") to each of the storage compartments.

[0028]

The pre-cooling device 13 is provided below the cooling device 11, and, similarly to the cooling device 11, is configured to exchange heat between refrigerant flowing through a refrigerant pipe and air. Detailed description of the pre-cooling device 13 is given later.