CLAIMS

[Claim 1]

A refrigerator comprising:

a heat insulating box body including: a refrigerator compartment including a compartment and a supercooling preservation compartment provided above the compartment; and a freezer compartment provided above the refrigerator compartment, an internal temperature of the compartment included in the refrigerator compartment being set to fall within a refrigeration temperature zone, an internal temperature of the supercooling preservation compartment being set to a supercooling temperature that is lower than the refrigerator temperature zone, an internal temperature of the freezer compartment being set to fall within a freezing temperature zone: and

a partition wall provided between the refrigerator compartment and the freezer compartment, and including a return air passage for the refrigerator compartment and a first heating device in the partition wall,

wherein a return air passage inlet is provided on a front side of the refrigerator compartment to allow air in the refrigerator compartment to flow into the return air passage,

an air outlet is provided on a rear side of the refrigerator compartment to allow cooling air to be blown from the air outlet, and

the first heating device is provided so as not to overlap with the return air passage as viewed in plan view.

[Claim 2]

The refrigerator of claim 1, wherein a heat insulating material is provided in the partition wall.

[Claim 3]

The refrigerator of claim 1 or claim 2, wherein the return air passage inlet is provided above the refrigerator compartment to allow air in the compartment and the supercooling preservation compartment included in the refrigerator compartment to flow into the return air passage through the return air passage inlet.

[Claim 4]

The refrigerator of any one of claims 1 to 3, wherein the supercooling preservation compartment is allowed to be used as either a compartment whose internal temperature is set to fall within a negative temperature zone that is lower than the supercooling temperature and in the vicinity of -3 degrees C or a compartment whose internal temperature is set to fall within a positive temperature zone that is higher than the supercooling temperature and in the vicinity of 1 degree C, and is allowed to be switched between the compartments.

[Claim 5]

The refrigerator of any one of claims 1 to 4, wherein a heat transfer member is provided in an upper region in the supercooling preservation compartment.

[Claim 6]

The refrigerator of claim 5, wherein the heat transfer member is made of a metal substance.

[Claim 7]

The refrigerator of any one of claims 1 to 6, wherein

a multi-layer shelf is provided at a lower surface of the supercooling preservation compartment, and

in the multi-layer shelf, a plurality of plate-like shelf members are stacked, with a space provided between the plurality of plate-like shelf members, and the space is sealed, with gas provided in the space.

[Claim 8]

The refrigerator of claim 7, wherein a second heating device is provided in the multi-layer shelf.

[Claim 9]

The refrigerator of claim 8, wherein the second heating device is a wire heater.