CLAIMS

[Claim 1]

A refrigerator comprising:

a box body having an opening port in a front surface of the box body and including a first storage compartment to be set to a refrigerating temperature zone and a second storage compartment located higher than the first storage compartment, the second storage compartment being to be set to a freezing temperature zone;

a door attached to the front surface of the box body, the door opening or closing the opening port;

a partition dividing the first storage compartment and the second storage compartment from each other vertically;

a third storage compartment provided lower than the partition and provided in an uppermost portion inside the first storage compartment, the third storage compartment being settable to a minus temperature zone;

a heater provided inside the partition;

a first return air passage provided inside the partition and disposed higher than the heater to cover an upper surface of the heater and through which return cool air in the first storage compartment is returned to a cooler chamber; and

a second return air passage provided inside the partition and disposed left or right of the heater and extends along a corresponding one of a left side surface and a right side surface of the heater and through which return cool air in the third storage compartment is returned to the cooler chamber,

the first return air passage and the second return air passage being air passages independent from each other,

the first return air passage and the second return air passage being partitioned from each other by a heat insulator,

an area of the upper surface of the heater being larger than each of an area of the left side surface of the heater and an area of the right side surface of the heater,

a region in which the upper surface and the first return air passage overlap each other in a top view of the partition being larger than a region in which either one of the

left side surface and the right side surface and the second return air passage overlap each other in a side view of the partition.

[Claim 2]

The refrigerator of claim 1, wherein the third storage compartment is switchable to at least a temperature zone of 0 to 3 degrees C, a temperature zone of -3 degrees C to 0 degrees C, or a temperature zone of -10 to -5 degrees C.

[Claim 3]

The refrigerator of claim 1 or claim 2,

wherein the first storage compartment has a space in front of the third storage compartment, and

wherein a bottom surface portion of the partition has

a first return air passage inlet through which cool air inside the first storage compartment is guided to the first return air passage, the first return air passage inlet being formed in a first portion facing the space between the door and the third storage compartment, and

a second return air passage inlet through which cool air inside the third storage compartment is guided to the second return air passage, the second return air passage inlet being formed in a second portion facing the third storage compartment.

[Claim 4]

The refrigerator of any one of claims 1 to 3,

wherein the third storage compartment includes a storage container and a front door at a front surface of the third storage compartment, the front door being openable and closable, and

wherein the front door is attached, in front of the storage container, to a bottom surface portion of the partition such that the front door is turnable.

[Claim 5]

The refrigerator of claim 4,

wherein the first storage compartment includes a plurality of shelves, and

wherein the third storage compartment is defined by a highest-stage shelf among the plurality of shelves, the front door, a side wall of the box body, and the partition.

[Claim 6]

The refrigerator of any one of claims 1 to 5, wherein an inside of the partition is filled with urethane foam.

[Claim 7]

The refrigerator of any one of claims 1 to 6,

wherein the heater has a cuboidal shape.

[Claim 8]

The refrigerator of any one of claims 1 to 7,

wherein the partition includes a third return air passage through which return cool air in the third storage compartment is returned to the cooler chamber, and

wherein the first return air passage, the second return air passage, and the third return air passage are air passages independent from one another, and the first return air passage, the second return air passage, and the third return air passage are partitioned from one another by a heat insulator.

[Claim 9]

The refrigerator of any one of claims 1 to 8, wherein a thickness of a heat insulator provided between the heater and the first return air passage is smaller than a thickness of a heat insulator provided between the heater and the second return air passage.

[Claim 10]

The refrigerator of any one of claims 1 to 9, wherein a rear portion of the first return air passage and a rear portion of the second return air passage each have an upward curve and are connected to a refrigerator-compartment return air passage outlet and a versatile-compartment return air passage outlet, respectively, which are formed at a rear surface portion of the partition that corresponds to a portion of a side surface of the cooler chamber.