CLAIMS

[Claim 1]

A refrigerator, comprising:

a first storage compartment in a refrigeration temperature range;

a second storage compartment in a refrigeration temperature range;

a third storage compartment in a cooling temperature range, the third storage compartment including wall sections that include a front surface section and a rear surface section, and being located between the first storage compartment and the second storage compartment;

a vacuum thermal insulator provided in each of the wall sections partitioning off the third storage compartment;

a cooler provided rearward of a rear surface of the third storage compartment;

a first air passage formed rearward of a rear surface of the vacuum thermal insulator provided in the rear surface section of the third storage compartment, the first air passage being configured to introduce air from the cooler into the second storage compartment;

a second air passage formed rearward of the rear surface of the vacuum thermal insulator provided in the rear surface section of the third storage compartment, the second air passage being configured to return air used at the second storage compartment to the cooler; and

a refrigerator compartment air return passage formed sideward of a side surface of the vacuum thermal insulator provided in the rear surface section of the third storage compartment, the refrigerator compartment air return passage being configured to return air used at a refrigerator compartment that is different from the first storage compartment, the second storage compartment, and the third storage compartment to the cooler,

the vacuum thermal insulator provided in the rear surface section of the third storage compartment being tilted and having a lower end positioned closer to the front surface section than is an upper end positioned closer to the rear surface section than is the lower end,

when the first air passage and the second air passage are viewed from a front, the first air passage and the second air passage being formed overlapping each other at a portion located toward the rear surface of the vacuum thermal insulator provided in the rear surface section of the third storage compartment,

the first air passage being configured to introduce air from the cooler into the second storage compartment at a portion located toward the rear surface of the vacuum thermal insulator provided in the rear surface section of the third storage compartment,

the second air passage being configured to return air from a lower end of a front surface of the cooler to a middle level of the front surface.

[Claim 2]

The refrigerator of claim 1, wherein

a first storage case, and a second storage case that is located higher than the first storage case are housed in the third storage compartment, the second storage case having a smaller capacity than does the first storage case, and

in a state where a door section of the third storage compartment is closed,

a rear end of the vacuum thermal insulator provided in a bottom surface section of the third storage compartment is positioned closer to the rear surface section than is a rear end of a bottom surface section of the first storage case housed in the third storage compartment, and

a rear end of the vacuum thermal insulator provided in an upper surface of the third storage compartment is positioned closer to the rear surface section than is an upper rear end of the second storage case housed in the third storage compartment.

[Claim 3]

The refrigerator of claim 2, wherein a lid structure configured to cover an open top of the second storage case is provided in the third storage compartment.

[Claim 4]

The refrigerator of claim 3, wherein the lid structure includes a fin portion that is positioned closer to a rear surface than is a rear surface side end portion of the second storage case and that is bent downward.

[Claim 5]

The refrigerator of claim 1, wherein the first air passage is branched into two in a width direction of the vacuum thermal insulator provided in the rear surface section of the third storage compartment, and is further branched into two in a vertical direction.

[Claim 6]

The refrigerator of any one of claims 1 to 5, wherein

the first storage compartment is an ice-making compartment,

the second storage compartment is a freezer compartment,

the third storage compartment is a vegetable compartment, and

the ice-making compartment, the vegetable compartment, and the freezer compartment are arranged in order from top.

[Claim 7]

The refrigerator of any one of claims 1 to 6, wherein a return port through which air used at the third storage compartment flows is formed diagonally to an outlet port through which air to be used at the third storage compartment flows.