[0005] Embodiments of the present invention seek to provide a refrigerator capable of suppressing an increase in volume of a first header and a second header.

SOLUTION TO PROBLEM

[0006] A refrigerator according to an aspect of the present invention comprises a housing and a refrigerant circuit. The refrigerant circuit is accommodated in the housing. The housing has a machinery chamber and a cooler chamber. The machinery chamber is provided in the housing at a lower portion on a rear side. The cooler chamber is provided in the housing on the rear side and disposed above the machinery chamber. The refrigerant circuit comprises a compressor, a condenser, a decompression device, and an evaporator. The refrigerant circuit is configured to pass refrigerant through the compressor, the condenser, the decompression device, and the evaporator in this order. The condenser includes a machinery chamber condenser, a condenser pipe, and a cabinet pipe. The compressor, the machinery chamber condenser and the decompression device are disposed in the machinery chamber. The evaporator is disposed in the cooler chamber. The machinery chamber condenser is connected to the compressor and the condenser pipe. The condenser pipe is connected to the machinery chamber condenser and the cabinet pipe, and disposed on each of a right side, a left side, and the rear side of the housing. The cabinet pipe is disposed at an edge of the housing on a front side. The machinery chamber condenser comprises a first header, a second header, and a plurality of flat tubes. The second header is spaced from the first header in a first direction. The plurality of flat tubes each extend in the first direction to be connected to each of the first and second headers, and also extend in a second direction crossing the first direction. The first and second headers each have an inner circumference formed in an elliptical shape having a minor axis and a major axis. The inner circumference has the minor axis along the first direction and the major axis along the second direction. The minor axis has a dimension allowing the first and second headers to pass the refrigerant at a flow velocity equal to or larger than a zero penetration flow velocity. An inflow pipe and an outflow pipe is connected to the second header. The inflow pipe being connected to the second header on a lower side as seen in an upward/downward direction. The outflow pipe being connected to the second header on an upper side as seen in the upward/downward direction.

ADVANTAGEOUS EFFECTS OF INVENTION

[0007] The present refrigerator has first and second headers each having an inner circumference formed in an elliptical shape having a minor axis and a major axis with the minor axis along the first direction and the major axis along the second direction. By reducing a dimension of the first and second headers in the first direction, an increase in volume of the first and second headers can be suppressed.

BRIEF DESCRIPTION OF DRAWINGS

[0008] Fig. 1 is a perspective view schematically showing a configuration of a refrigerator according to an embodiment on a front side.

Fig. 2 is a perspective view schematically showing the configuration of the refrigerator according to the embodiment on a rear side.

Fig. 3 is a circuit diagram schematically showing a refrigerant circuit of the refrigerator according to the embodiment.

Fig. 4 is a front view schematically showing a configuration of a machinery