achieved at a load point other than a designed load point (for example, a case in which a door is opened and closed and an internal temperature abruptly increases). To solve this problem, a larger number of capillary tubes having different diameters can be used to achieve adjustment of the flow rate of the refrigerant for a larger number of load points; however, this configuration adversely results in an increased product cost.

[0007]

The present invention is intended to solve the above-described problem and provide a refrigerator that can achieve energy saving by appropriately adjusting the flow rate of refrigerant supplied to a cooler depending on the operation state of the refrigerator.

Solution to Problem
[0008]

A refrigerator according to an embodiment of the present invention includes a storage compartment, a refrigerant circuit in which a compressor, a radiator, a plurality of capillary tubes having different Cv values, a selecting unit configured to select at least one of the plurality of capillary tubes, and a cooler are connected to each other via pipes to circulate refrigerant, the refrigerant flowing through the at least one of the plurality of capillary tubes, a first sensor configured to output a first sensor value on the basis of detection of an evaporating temperature of the refrigerant or an evaporating pressure of the refrigerant, a second sensor configured to output a second sensor value on the basis of detection of at least one of a condensing temperature of the refrigerant and a condensing pressure of the refrigerant, and a controller configured to control the selecting unit on the basis of a flow rate of the refrigerant based on a rotational frequency of the compressor, the first sensor value, and the second sensor value, wherein the plurality of capillary tubes includes a first capillary tube having a first Cv value, and a second capillary tube having a second Cv value smaller than the first Cv value, wherein the selecting unit is configured to select one of a first stage in which the refrigerant flows to both of the first capillary tube and the second capillary tube, a second stage in which the refrigerant flows only to the first capillary tube, and a third stage in which the refrigerant flows only to the second capillary tube, and wherein the controller is configured to control the selecting unit to periodically select the first stage and the second stage alternately, or the second stage and the third stage alternately.

Advantageous Effects of Invention
[0009]

The refrigerator according to the embodiment of the present invention can supply a cooler with refrigerant of a flow rate suitable to the operation state of the