CLAIMS

[Claim 1]

A refrigerator comprising:

a storage compartment;

operation display means configured to display a plurality of power saving levels each indicating a power saving index and to accept an operation input of selecting one power saving level from among the plurality of power saving levels; and

control means configured to, when an operation input of selecting one power saving level from among the plurality of power saving levels displayed on the operation display means is made, calculate one or a plurality of target temperature setting plans regarding a target temperature for the storage compartment in accordance with the selected one power saving level, wherein

the operation display means displays the target temperature setting plans calculated by the control means and accepts an operation input of executing the target temperature setting plan.

[Claim 2]

The refrigerator of claim 1, further comprising

load detection means configured to detect a food load amount within the storage compartment, wherein

when the operation input of selecting one power saving level from among the plurality of power saving levels displayed on the operation display means is made, the control means calculates a target temperature setting plan based on the selected one power saving level and a load detected by the load detection means.

[Claim 3]

The refrigerator of claim 2, wherein

the control means calculates a plurality of target temperature setting plans including the target temperature setting plan calculated based on the selected one power saving level and the load detected by the load detection means, and

in displaying the plurality of target temperature setting plans, the operation display means displays the target temperature setting plans such that the target temperature setting plan calculated based on the selected one power saving level and the load detected by the load detection means is distinguished from the other target temperature setting plans.

[Claim 4]

The refrigerator of any one of claims 1 to 3, further comprising

a door opening frequency detection sensor configured to detect an

opening frequency of a door of the storage compartment, wherein

the control means calculates the current power saving level based on information indicating the opening frequency of the door detected by the door opening frequency detection sensor and a set temperature for the storage compartment, and

the operation display means displays either one of or both the power saving level calculated by the control means and information which prompts power saving.

[Claim 5]

The refrigerator of any one of claims 1 to 4, wherein the operation display means is of a touch panel type.

[Claim 6]

The refrigerator of any one of claims 1 to 5, further comprising

external device communication means configured to communicate with an external device, wherein

upon acquiring, via the external device communication means, information indicating that power consumption of the external device is increased to be equal to or higher than a threshold, the control means switches to a target temperature setting plan in which power consumption is lower than the current power consumption.

[Claim 7]

The refrigerator of any one of claims 1 to 6, further comprising

cloud communication means configured to communicate with an Internet cloud via a network, wherein

the control means transmits operation information of the refrigerator via the cloud communication means to the Internet cloud to store the operation information of the refrigerator in the Internet cloud.

[Claim 8]

The refrigerator of any one of claims 1 to 7, further comprising

external device communication means configured to communicate with an external device, wherein

upon acquiring, via the external device communication means, information indicating that it is difficult to supply power from any device other than a storage battery, the control means calculates a target temperature setting plan in which power consumption of the refrigerator is minimized, and

the operation display means displays the target temperature setting plan in which the power consumption of the refrigerator is minimized.

[Claim 9]

The refrigerator of claim 8, wherein

upon acquiring, via the external device communication means, the information indicating that it is difficult to supply power from any device other than the storage battery, the control means calculates a plurality of target temperature setting plans including the target temperature setting plan in which the power consumption of the refrigerator is minimized, and

the operation display means displays the plurality of target temperature setting plans including the target temperature setting plan in which the power consumption of the refrigerator is minimized.

[Claim 10]

The refrigerator of any one of claims 1 to 9, wherein the operation display means displays either one of or both a current set temperature for the storage compartment and a current power saving level.