refrigerator communication unit of the refrigerator via an external network, and a controller configured to control the refrigerator and the information terminal. The controller includes determination circuitry configured to determine a suited setting adapted for a usage condition of the refrigerator of a user on the basis of operation information of the refrigerator, proposition circuitry configured to propose the suited setting determined by the determination circuitry by use of the information terminal, and operation control circuitry configured to apply the suited setting proposed by the proposition circuitry to the refrigerator when the user accepts the suited setting.

Advantageous Effects of Invention

[0007]

According to an embodiment of the present disclosure, determined suited setting is proposed by use of the information terminal. Therefore, the user can recognize the suited setting adapted for the usage condition. Thus, the refrigerator can perform an operation suited for the usage condition of the user.

Brief Description of Drawings

[0008]

[Fig. 1] Fig. 1 is a schematic diagram illustrating a refrigerator communication system according to Embodiment 1.

[Fig. 2] Fig. 2 is a perspective view illustrating a refrigerator according to Embodiment 1.

[Fig. 3] Fig. 3 is a front view of the refrigerator according to Embodiment 1.

[Fig. 4] Fig. 4 is one cross-sectional view of the refrigerator according to Embodiment 1.

[Fig. 5] Fig. 5 is another cross-sectional view of the refrigerator according to Embodiment 1.

[Fig. 6] Fig. 6 is a functional block diagram illustrating the refrigerator communication system according to Embodiment 1.

[Fig. 7] Fig. 7 is a flowchart illustrating an operation of the refrigerator communication system according to Embodiment 1.

[Fig. 8] Fig. 8 is a flowchart illustrating an example of operation of the refrigerator communication system according to Embodiment 1.

CLAIMS

[Claim 1]

A refrigerator communication system comprising:

a refrigerator configured to refrigerate an article stored in a storage compartment formed in the refrigerator and having a refrigerator communication unit configured to transmit and receive data;

an information terminal having an information communication unit configured to communicate with the refrigerator communication unit of the refrigerator via an external network; and

a controller configured to control the refrigerator and the information terminal,

the controller including

determination circuitry configured to determine a suited setting adapted for a usage condition of the refrigerator of a user on the basis of operation information of the refrigerator,

proposition circuitry configured to propose the suited setting determined by the determination circuitry by use of the information terminal, and operation control circuitry configured to apply the suited setting proposed by the proposition circuitry to the refrigerator when the user accepts the suited setting.

[Claim 2]

The refrigerator communication system of claim 1, wherein

the operation control circuitry is configured to determine whether the suited setting is applicable to the refrigerator.

[Claim 3]

The refrigerator communication system of claim 1 or 2, wherein

the controller further includes use frequency prediction circuitry configured to predict a use frequency of the refrigerator for each time zone, and

the operation information includes the use frequency of the refrigerator for each time zone predicted by the use frequency prediction circuitry.

[Claim 4]

The refrigerator communication system of claim 3, wherein

the controller further includes door opening-closing detection circuitry configured to detect opening and closing of a door of the storage compartment, and

the use frequency prediction circuitry is configured to predict a use frequency of the refrigerator for each time zone on the basis of the number of times of opening and closing of the door detected by the door opening-closing detection circuitry.

[Claim 5]

The refrigerator communication system of any one of claims 1 to 4, wherein

the controller further includes temperature detection circuitry configured to detect a temperature of the storage compartment, and

the operation information includes the temperature detected by the temperature detection circuitry.

[Claim 6]

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

the refrigerator and the information terminal are each configured to communicate with an other refrigerator owned by an other user different from the user of the refrigerator via the external network.

[Claim 7]

The refrigerator communication system of claim 6, wherein

the controller further includes comparison circuitry configured to compare the operation information of the refrigerator with operation information of the other refrigerator owned by the other user and determine whether or not there is a difference between the operation information of the refrigerator and the operation information of the other refrigerator,

the determination circuitry is configured to determine a suited setting adapted for a usage condition of the other refrigerator of the other user on the basis of the operation information of the other refrigerator when the comparison circuitry

determines, through comparison, that the operation information of the refrigerator and the operation information of the other refrigerator are different from each other, and

the proposition circuitry is configured to propose the suited setting determined by the determination circuitry by use of the information terminal.

[Claim 8]

The refrigerator communication system of any one of claims 1 to 7, wherein

the suited setting includes a setting that suits a usual usage condition of the refrigerator of the user.

[Claim 9]

The refrigerator communication system of any one of claims 1 to 8, wherein

the controller is provided at the refrigerator.

[Claim 10]

The refrigerator communication system of any one of claims 1 to 8, wherein

the controller is provided at the information terminal.

[Claim 11]

The refrigerator communication system of any one of claims 1 to 8, wherein

the controller is provided at a cloud server existing on the external network.