Claims

[Claim 1]

A furniture comprising:

a movable part;

a controller configured to automatically perform a first operation to move the movable part from a first state to a second state by repeating a second operation to move the movable part, the controller being configured to perform the second operation if a first requirement is satisfied, the controller being configured not to perform the second operation to move the movable part if the first requirement isn't satisfied, the first requirement being

a variation related to a biological signal of a user in a first period is smaller than the variation in a first prior period which exists prior to the first period, or

an absolute value of a difference between the variation in the first period and the variation in the first prior period is smaller than a first variation threshold.

[Claim 2]

The furniture according to claim 1, wherein

the movable part includes a section,

in the second operation, the controller performs at least one of: an operation of decreasing an inclination of

the section of the furniture; an operation of decreasing a gap between a height of a head part of a mattress and a height of a waist part of the mattress; and an operation of decreasing a difference between a pressure in the head part and a pressure in the waist part, and

a difference between an angle of the section after the decrease of inclination and an angle of the section in a period prior to the decrease of inclination is 1 degree or smaller.

[Claim 3]

The furniture according to claim 1, wherein

the furniture further comprises a user interface capable of communicating with the controller, and

if the user interface receives a first instruction by the user, the controller starts detecting a state of the user, the state of the user including whether the user is sleeping or not, or level of sleeping of the user.

[Claim 4]

The furniture according to claim 1, wherein the controller starts detecting a state of the user, the state of the user including whether the user is sleeping or not, or level of sleeping of the user.

[Claim 5]

The furniture according to claim 1, wherein the controller finishes the first operation if at least one of states where the user wakes up and the user is away from a bed continues for a second time threshold or longer.

[Claim 6]

The furniture according to claim 3, wherein the controller finishes the second operation if at least one of states where the user wakes up and the user is away from a bed continues for a second time threshold or longer.

[Claim 7]

The furniture according to claim 4, wherein the controller finishes detecting the state of the user if at least one of states where the user wakes up and the user is away from a bed continues for a second time threshold or longer.

[Claim 8]

The furniture according to claim 1, wherein the signal includes information on a heartbeat rate of the user or a respiratory rate of the user.

[Claim 9]

The furniture according to claim 1, wherein the signal includes information on at least one of motions of arms, torso, and feet of the user, or information on rolling over of the user.

[Claim 10]

The furniture according to claim 1, wherein, in the first operation, the controller does not perform the second operation if the absolute value is equal to or larger than the first variation threshold.

[Claim 11]

The furniture according to claim 1, wherein the controller ~~does not~~ performs the second operation if the variation in ~~the first~~ a second period is smaller than the variation in ~~a next first prior period~~ the first period, the first period being a period during the first operation, the ~~next first prior period~~ second period being a period during a next first operation.

[Claim 12]

The furniture according to claim 2, wherein

the signal includes a first signal state and a second signal state,

the variation of the signal in the second signal state is smaller than the variation of the signal in the first signal state, and

when the signal becomes the first signal state at the time before and closest to predetermined time, the controller sets the inclination of the section larger than the inclination increased.

[Claim 13]

The furniture according to claim 1, wherein the controller ~~does not~~ performs the second operation if the variation in the first period is smaller than the variation in the first prior period, the first period and the first prior period being a successive period during the first operation.

[Claim 14]

The furniture according to claim 1, wherein the controller is configured to perform the first operation at a first time where a desired period is elapsed since a second time, the second time being a time the user of the furniture falls asleep.

[Claim 15]

The furniture according to claim 1, wherein the controller is configured to perform a third operation by performing at least one of: an operation of increasing an inclination of the section of the furniture; an operation of increasing a gap between a height of a head part of a mattress and a height of a waist part of the mattress; and an operation of increasing a difference between a pressure in the head part and a pressure in the waist part.

[Claim 16]

The furniture according to claim 15, wherein the controller is configured to perform the third operation if a current time is close to a set time user wakes up.

[Claim 17]

The furniture according to claim 15, wherein the controller is configured to perform the third operation if the variation is increased.