

(11) **EP 2 016 879 A2**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

21.01.2009 Bulletin 2009/04

(51) Int CI.:

A47K 4/00 (2006.01)

G05B 15/02 (2006.01)

(21) Application number: 08157927.8

(22) Date of filing: 10.06.2008

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated Extension States:

AL BA MK RS

(30) Priority: 19.07.2007 CN 200720154898 U

(71) Applicant: Hocheng Corporation Taipei 104 (TW)

(72) Inventor: Lin, Chun-Hui Taipei City 104 (TW)

(74) Representative: Lang, Christian et al LangRaible GbR
Patent- und Rechtsanwälte

80331 München (DE)

Herzog-Wilhelm-Straße 22

(54) Customized bathroom having controller

(57) A control device is used to setup equipments in a bathroom. The equipments are setup according to individual's customs. The equipments are so setup to become comfortable, convenient and personalized.

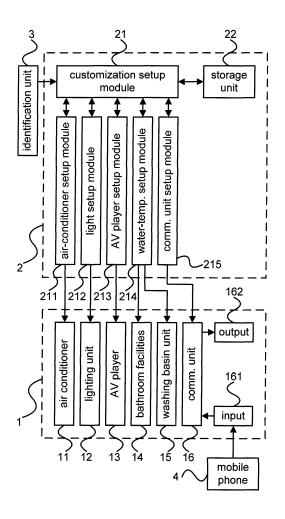


FIG.5

EP 2 016 879 A2

20

40

50

55

Description

Field of the invention

[0001] The present invention relates to a bathroom; more particularly, relates to setting up equipments in a bathroom space by a control device according to customs of individual for comfort, convenience and personality on using.

1

Description of the Related Art

[0002] A bathroom generally has bathroom facilities, like a shower facility, a toilet seat, a bathtub, a washbowl, etc., for stool, washing or bathing of a user.

[0003] Although the bathroom allows a user to go to a stool or to take a bath or shower, simple cool and/or warm water is provided for washing, bathing and showering. And, when a warm water is requested, a period of waiting is required for turning on a heater and for reaching a requested temperature for the warm water; so, water is wasted and inconvenience is brought forth on using. Besides, on hearing a phone ring after entering into the bathroom, a telephone is not answered with doors and windows shut. Moreover, on taking a bath, the user faces only walls and roof without any relaxing accessories owing to restrictions of the bathroom. Hence, the prior art does not fulfill users' requests on actual use.

Summary of the invention

[0004] The main purpose of the present invention is to set up equipments in a bathroom space by a control device according to customs of individual for comfort, convenience and personality on using

[0005] To achieve the above purpose, the present invention is a customized bathroom using a controller, comprising a bathroom space comprising an air conditioner, a lighting unit, an AV player, a plurality of bathroom facilities, a washing basin unit and a communication unit; a control device with a customization setup module in the washing basin unit being electrically connected with the air conditioner, the lighting unit, the AV player, the bathroom facilities, the washing basin unit and the communication unit; and an identification unit electrically connected with the customization setup module at a proper place outside of the bathroom space. Accordingly, a novel customized bathroom using a controller is obtained.

Brief descriptions of the drawings

[0006] The present invention will be better understood from the following detailed description of the preferred embodiment according to the present invention, taken in conjunction with the accompanying drawings, in which

FIG.1 is the side view showing the preferred embodiment according to the present invention;

- FIG.2 is the top-down view;
- FIG.3 is the block view showing the control device;
- FIG.4 is the top-down view showing the state of use;
- FIG.5 is the block view showing the state of use.

Description of the preferred embodiment

[0007] The following description of the preferred embodiment is provided to understand the features and the structures of the present invention.

[0008] Please refer to FIG.1 to FIG.3, which are a side view and a top-down view showing a preferred embodiment according to the present invention; and a block view showing a control device. As shown in the figures, the present invention is a customized bathroom using a controller, comprising a bathroom space 1, a control device 2 and an identification unit 3, where components in the bathroom space 2 are setup by the control device 3 according to personal preference for comfort, convenience and personality.

[0009] The bathroom space 1 comprises an air conditioner 1 1, a lighting unit 12, an audio-video (AV) player 13, a plurality of bathroom facilities 14, a washing basin unit 15 and a communication unit 16, where the bathroom facilities 14 comprises a bathtub unit 141, a shower unit 142 and a toilet seat 143; the washing basin unit 15 comprises two washbowls 151, a mirror 152 and a plurality of lockers 153; the washing basin unit 15 has a weight scale 154 below; the communication unit 16 has an input 161 and an output 162; the input 161 has a wireless transmission interface of bluetooth or ultraviolet or a wire transmission interface; and the output 162 is a speaker.

[0010] The control device 2 is deposed in the washing basin unit 15 and is electrically connected with the air conditioner 1 1, the lighting unit 12, the AV player 13, the bathroom facilities 14, the washing basin unit 15 and the communication unit 16; the control device 2 comprises a customization setup module 21 and a storage unit 22; the customization setup module 21 comprises an airconditioner setup module 21 electrically connected with the air conditioner 1 1, a light setup module 212 electrically connected with the lighting unit 12, an AV player setup module 213 electrically connected with the AV player 13, a water-temperature setup module 214 electrically connected with the bathroom facilities 14 and the washing basin unit 15, and a communication unit setup module 215 electrically connected with the communication unit 16; and setup parameters are stored in the storage unit 22.

[0011] The identification unit 3 is deposed at a proper place outside of the bathroom space 1 and is electrically connected with the customization setup module 21; and the identification unit 3 is a fingerprint reader. Thus, a novel customized bathroom using a controller is obtained.

[0012] Please refer to FIG.4 and FIG.5, which are a top-down view and a block view showing a state of use.

15

20

25

30

35

40

50

As shown in the figure, when using the present invention, lockers 153 are used to put bathing and showering accessories for individuals separately; each individual sets up an air conditioner 11, a lighting unit 12, an AV player 13, a plurality of bathroom facilities 14, a washing basin unit 15 and a communication unit 16 of a bathroom space 1 under personal requests through a customization setup module 21 of a control device 2. In the customization setup module 21, an air-conditioner setup module 211 is used to setup the air conditioner 11; a light setup module 212 is used to setup the lighting unit 12 for its turning on or off and its brightness; an AV player setup module 2 1 3 is used to setup the AV player 13 for its channels, volume, etc.; a water-temperature setup module 214 is used to setup the bathroom facilities 14 and the washing basin unit 15 for their water temperatures (such as water temperatures of washbowls 151, a bathtub unit 141, a shower unit 142 and a toilet seat 143). After an input 161 of a communication unit 16 is connected with a mobile phone 4, a communication unit setup module 215 is used to setup functions of call forwarding, sound volume, automatic answering, etc. Then, setup parameters are categorized and are stored in a storage unit 22 for each individual after being identified by an identification unit 3. Thus, customized environmental parameters of the bathroom space 1 are setup and stored in the control device 2 for each individual.

[0013] On entering the bathroom space 1, an individual is identified by the identification unit 3 outside of the bathroom space 1. After the identification, customized environmental parameters stored in the storage unit 22 are read for the individual. The individual enters the bathroom space 1; then the accessories in the locker 153 are accessed. A weight scale 154 below the washing basin unit 15 is used to weight the individual. The equipments in the bathroom space 1 are turned on according to parameters setup for air temperature, light brightness, AV channels, sound volume, water temperature, call forwarding, automatic answering, etc., where the equipments comprises the air conditioner 11, the lighting unit 12, the AV player 13, the bathroom facilities 14, the washing basin unit 15 and the communication unit 16. Thus, the equipments in the bathroom space 1 provides customized states of use for the individual with the customization setup module 21 and the storage unit 22.

[0014] To sum up, the present invention is a customized bathroom using a controller, where equipments in a bathroom space is setup by a control device according to customs of individual for comfort, convenience and personality on using.

[0015] The preferred embodiment herein disclosed is not intended to unnecessarily limit the scope of the invention. Therefore, simple modifications or variations belonging to the equivalent of the scope of the claims and the instructions disclosed herein for a patent are all within the scope of the present invention.

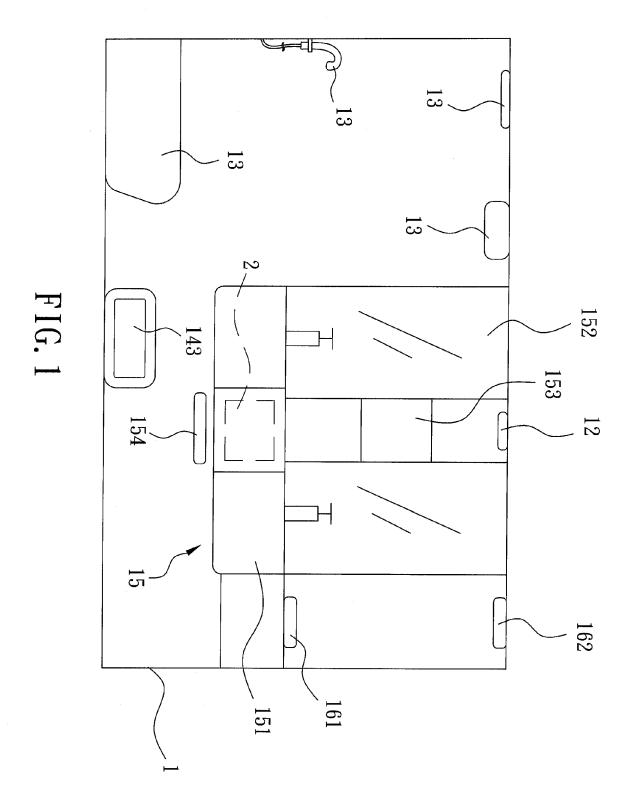
Claims

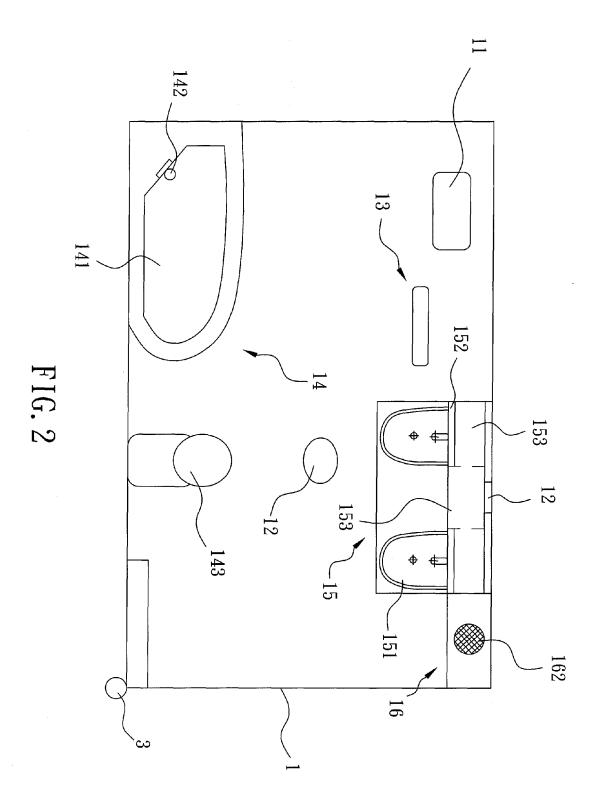
A customized bathroom using a controller, comprising:

a bathroom space, said bathroom space having an air conditioner, a lighting unit, an audio-video (AV) player, a plurality of bathroom facilities, a washing basin unit and a communication unit; a control device, said control device being deposed in said washing basin unit, said control device being electrically connected with said air conditioner, said lighting unit, said AV player, said bathroom facilities, said washing basin unit and said communication unit, said control device comprising a customization setup module and a storage unit; and an identification unit, said identification unit being deposed outside of said bathroom space, said identification unit being electrically connected with said customization setup module.

- 2. The bathroom according to claim 1, wherein said bathroom facilities comprises a bathtub unit, a shower unit and a toilet seat.
- 3. The bathroom according to claim 1, wherein said washing basin unit comprises two washbowls, a mirror and a plurality of lockers; and wherein said washing basin unit has a weight scale below said washing basin unit.
- 4. The bathroom according to claim 1, wherein said communication unit has an input and an output.
- **5.** The bathroom according to claim 4, wherein said input has a wireless transmission interface.
- The bathroom according to claim 4, wherein said input has a wire transmission interface.
- 7. The bathroom according to claim 4, wherein said output is a speaker.
 - 8. The bathroom according to claim 1, wherein said customization setup module comprises an air-conditioner setup module electrically connected with said air conditioner; a light setup module electrically connected with said lighting unit; an AV player setup module electrically connected with said AV player; a water-temperature setup module electrically connected with said bathroom facilities and said washing basin unit; and a communication unit setup module electrically connected with said communication unit.

9. The bathroom according to claim 1, wherein said identification unit is a fingerprint reader





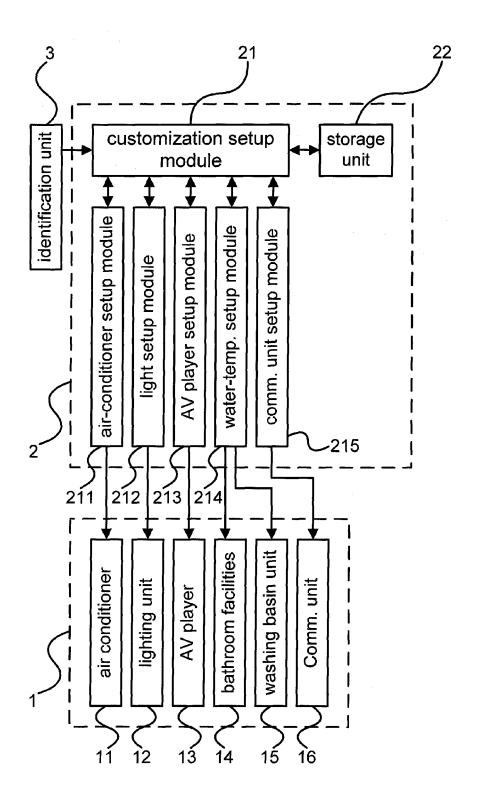
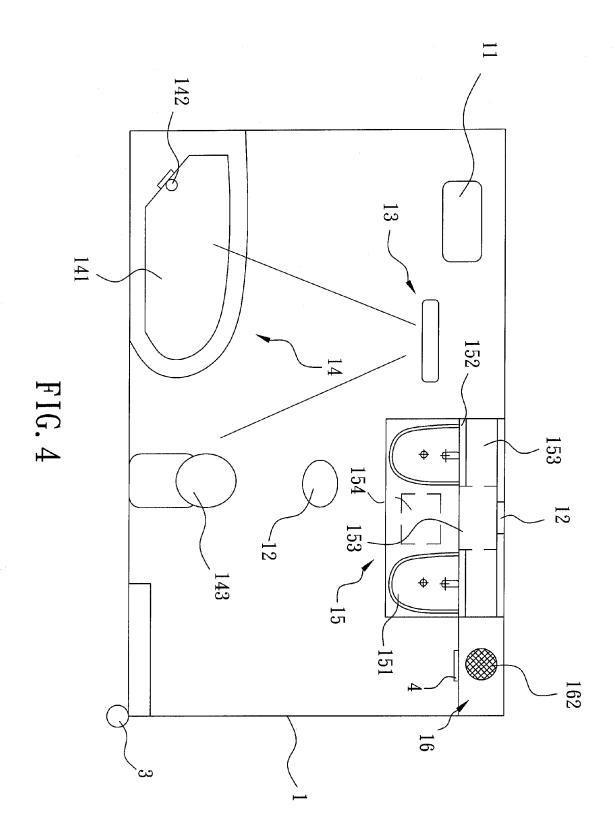


FIG.3



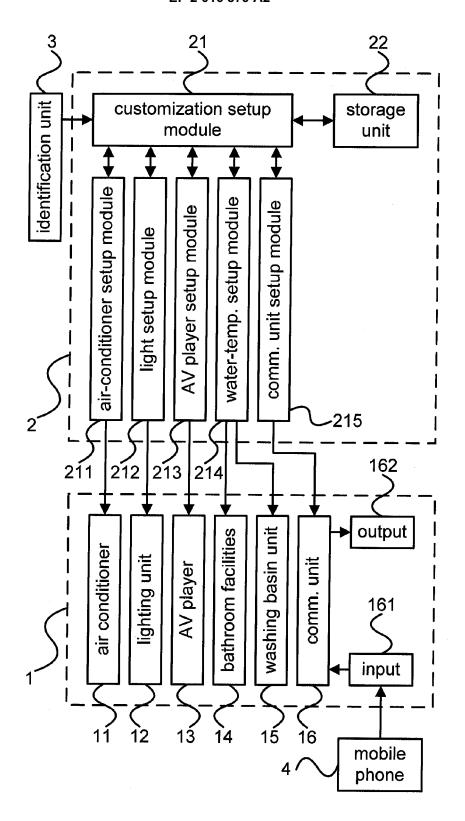


FIG.5