Office européen des brevets

# (12)

### **EUROPEAN PATENT APPLICATION**

(43) Date of publication:

24.11.2004 Bulletin 2004/48

(51) Int CI.7: **H05B 37/02** 

(21) Application number: 04102234.4

(22) Date of filing: 20.05.2004

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR Designated Extension States:

AL HR LT LV MK

(30) Priority: 20.05.2003 IT BO20030311

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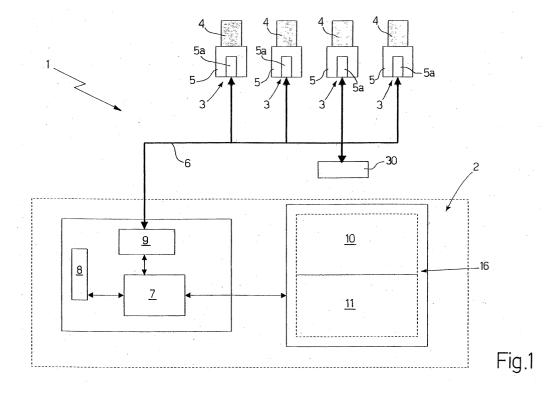
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## (54) System for the remote control of light fixtures

(57) System for the remote control of light fixtures (3) located in a room, each of which comprises a lamp (4) and a local control unit (5) suited to control the operation of the lamp itself; the system comprising a remote control terminal (2), and a data communication bus (6) connected to the remote control terminal and to each local control unit to allow a bidirectional exchange of data; the remote control terminal is provided with a first graphic interface (12) comprising a reference grid (13)

associated with the room in which the light fixtures are located, and means of configuration (140,150,160), suited for detecting the selection, by the user, of the position of at least one light fixture on the reference grid, and for assigning, in the point selected on the reference grid, a light fixture graphic element (3a) associated with a corresponding light fixture (3); the light fixture graphic elements and the reference grid define a graphic map which allows the user to select and control the light fixtures.



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#### Description

**[0001]** The present invention relates to a system for the remote control of light fixtures.

**[0002]** Systems for the remote control of light fixtures are known, in which, through a remote control terminal, the user is able to pilot and/or monitor the operating status of a plurality of light fixtures located in an environment.

**[0003]** In particular in the above-mentioned systems the light fixtures comprise a lamp and a local control unit which pilots the operation of the lamp itself and is able to communicate, through a data communication bus, with the remote control terminal which shows the user a number of information concerning the operating status of each lamp, and is provided with a series of control devices which enable the user himself to send commands to the light fixtures in the system so as to control the switching on/off or the light intensity of one or more lamps.

[0004] Although widely used, the remote control systems for light fixtures propose up till now present the inconvenient aspect of being too complex and not very practical to use for the user, who is therefore unable to make adequate use of their advantages and functions.

[0005] It is an object of the present invention to provide a system for the remote control of light fixtures which is particularly simple and practical to configure and use.

**[0006]** According to the present invention, there is provided a system for the remote control of light fixtures as described in claim 1 and, preferably, in any one of the following Claims depending directly or indirectly on Claim 1.

**[0007]** The present invention will now be descried with reference to the enclosed drawings, which illustrate a non limiting embodiment of it, wherein:

- figure 1 illustrates a block diagram of the system for the remote control of light fixtures realised according to the dictates of the present invention;
- figure 2 illustrates a flow chart of the operations implemented during the configuration of the graphic map of control and selection of the light fixtures of the system for the remote control of light fixtures illustrated in figure 1;
- figure 3 illustrates a first graphic interface displayed by the remote control terminal of the system for the remote control of light fixtures illustrated in figure 1;
- figure 4 illustrates a second graphic interface displayed by the remote control terminal of the system for the remote control of light fixtures illustrated in figure 1;
- figure 5 shows a flow chart of the operations implemented during the configuration of a group of light fixtures of the system for the remote control of light fixtures;
- figure 6 illustrates a third graphic interface dis-

- played by the remote control terminal of the system for the remote control of light fixtures illustrated in figure 1;
- figure 7 illustrates a fourth graphic interface displayed by the remote control terminal of the system for the remote control of light fixtures illustrated in figure 1; e
- figure 8 illustrates a fifth graphic interface displayed by the remote control terminal of the system for the remote control of light fixtures illustrated in figure 1.

**[0008]** Number 1 in Figure 1 indicates as a whole a system for the remote control of light fixtures 1, which is suited to allow a user to configure, by means of a remote control terminal 2, a graphic map of the light fixtures 3 located inside an environment or room, so that, by means of that graphic map, he can then select and control in remote mode a number of operating parameters of one or more light fixtures 3 locate in the same environment.

**[0009]** Each light fixture 3 present in the environment is of a known type and comprises a source of light, that is a lamp 4 such as, for example, a fluorescent lamp, a halogen lamp, a discharge lamp, a lamp with LED, or any other type of lamp; and a local control unit 5, which is electrically coupled to the lamp 4 to control its operation, and is connected through a data communication bus 6 to the remote control terminal 2 to perform with the latter a bidirectional exchange of data.

**[0010]** In particular, the local control unit 5 of each light fixture 3 comprises a processing circuit 5a, which is provided with an internal memory (not illustrated) suited for storing an address or identification code  $C_P$  which univocally identifies the light fixture 3, and a lamp code  $C_{LAMP}$  suited to identify an information concerning the type of lamp 4 coupled to the local control unit 5.

**[0011]** The processing circuit 5a of the local control unit 5 also comprises a data receiving and transmitting block (not illustrated), which is connected to the data communication bus 6 so as to be able to carry out a bidirectional exchange of data with the latter, implementing a data communication protocol of a known type, in particular the DALI communication protocol, which will not be further described since it is a protocol of a known type. In this particular case, the data communication bus 6 may be defined by any type of means of transmission, for example a pair of telephone cables.

[0012] As far as concerns the remote control terminal 2, it is provided with a processing device 7, for example a microprocessor that is able to implement a series of control and command operations (described below in detail); with a memory 8 suited to cooperate with the processing device 7 to store data and with a number of graphic interfaces (which will be described below in detail); with a receiving and transmitting block 9, which is connected to the data communication bus 6 and is suited to receive and transmit data from and to the latter, implementing the above-mentioned DALI communica-

tion protocol.

[0013] The remote control terminal 2 also comprises a display device 10 suited to receive a series of data from the processing device 7 and to display them to the user in a suitable graphic format (described below in detail); and a command device 11 connected to the processing device 7 and suited to allow the user to give a series of commands to the remote control terminal 2 during the control of the light fixtures 3. In this particular case, in the example illustrated in figure 1, the display device 10 and the command device 11 are integrated in a single interface appliance composed of a display and command panel of the Touch Screen type, indicated below with number 16, by means of which the user is able both to configure the graphic map for the control and selection of the light fixtures 3, and to perform a series of other operations, for example, the piloting and remote monitoring of the operating status of one or more light fixtures 3 located in the environment.

[0014] With reference to the flow chart shown in figure 2, the operation of the system 1 for the remote control of light fixtures will be described below, which, unlike the control systems of the prior art, allows the user to interact through the remote control terminal 2 with the local control unit 5 to "construct" the graphic representation of the light fixtures 3 located in the environment, thus generating a real "graphic map of control and selection" of the same light fixtures 3.

**[0015]** It is presumed that initially all the lamps 4 of the light fixtures 3 are in OFF condition.

**[0016]** The phase of configuration of the graphic map of control and selection of the light fixtures 3 begins with the operations of downloading from the memory 8, by means of the processing device 9, a first graphic interface 12 (illustrated in figure 3) and with the display of the same to the user by means of the Touch Screen 16 (block 100).

**[0017]** As better illustrated in the example in figure 3, the first graphic interface 12 comprises a matrix or reference grid 13, which is made up of a series of reference lines and columns which define a spatial graphic subdivision of the environment in which the light fixtures 3 are located; and a display window 14 of the type of lamp.

**[0018]** At the same time as displaying the first graphic interface 12 on the Touch Screen 16, the processing device 7 commands the transmission, through the data communication bus 6, of an interrogation signal to the local control units 5.

**[0019]** The local control units 5 receive the interrogation signal from the data communication bus 6, and one of them, chosen according to a criterion established by the DALI protocol, passes from OFF condition to ON condition, while the other lamps 4 remain in OFF condition, so as to supply the user with a visual signal of the light fixture 3 to be positioned (block 110) graphically on the reference grid 13.

**[0020]** After it has been activated, the local control unit 5 transmits in the data communication bus 6 the cor-

responding lamp code  $C_{LAMP}$  which identifies the type of lamp located in the activated light fixture 3, and its identification code  $C_P$  (block 120).

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**[0021]** The processing device 7 of the remote control terminal 2 receives from the data communication bus 6 the identification code  $C_P$  and the lamp code  $C_{LAMP}$  corresponding to the activated light fixture 3, and searches for a lamp symbol or icon associated with the lamp code  $C_{LAMP}$  in a table stored in the memory 8.

[0022] Once it has found the symbol or icon corresponding to the lamp code C<sub>LAMP</sub>, the processing device 7 commands the downloading of the symbol or icon from the memory 8 and displays it on the display window 14 (block 130).

**[0023]** At this point the processing device 7, goes into a condition of waiting (output NO block 140) for the selection of the position of a light fixture 3 on the reference grid 13 (block 140) by the user.

[0024] In this phase the user is able to assign the position of the light fixture 3 manually on the reference grid 13 by typing in or pressing on the grid the point (line, column) in which he wants to assign the light fixture 3 graphically.

[0025] The waiting condition of the processing device 7 ends (output YES block 140) when the user presses and selects on the Touch Screen 16 the position of the light fixture 3 to be inserted in the reference grid 13. In this phase, the processing device 7 cooperates with the Touch Screen 16 to detect the pressed position, that is the line P<sub>X</sub> and the column P<sub>Y</sub> selected on the reference grid 13, and stores in the memory 8 the information associated with the light fixture 3 assigned to the graphic map of selection and control, that is the respective lamp code  $C_{\text{LAMP}}$ , the identification code  $C_{\text{P}}$  and the position P<sub>X</sub> and P<sub>Y</sub> of the point pressed by the user on the reference grid 13 and calculated with respect to the axes X and Y (not illustrated) which define the references of the reference grid itself (block 150). In this phase, in the point pressed by the user on the positioning grid 13 (indicated with the letter A in the example illustrated in figure 3) the processing device 7 activates the display of a light fixture graphic element 3a associated with the light fixture 3 located in the environment (corresponding to the identification code CP just detected and memorised). This light fixture graphic element 3a may preferably, but not necessarily, be graphically represented by the symbol or icon associated with the type of lamp 4 detected and displayed in the display window 14.

**[0026]** After the above-mentioned storing and assigning on the reference grid 13 of the light fixture graphic element 3a corresponding to the light fixture 3, the processing device 7 commands preferably, but not necessarily, the transmission on the data communication bus 6 of a confirmation signal  $C_{CONF}$  which codifies the identification code  $C_P$  for the light fixture 3 just memorised.

[0027] The local control unit 5 of the light fixture 3 associated with the identification code  $C_{\rm p}$ , receives the

confirmation signal  $C_{ONF}$  from the communication bus and gives the corresponding lamp 4 the command to pass from ON condition to a condition of confirming memorisation in which the lamp 4 is activated according to a predetermined operating mode, in such a way as to provide the user with visual feedback of confirmation of the memorising of the light fixture 3 which has just been configured on the reference grid 13 (block 160). For example the condition of confirming memorisation may correspond to the temporary blinking of the lamp 4, or a gradual increase or decease of its degree of luminosity or any other type of operation of the lamp 4, which allows the user to have a "direct visual confirmation" that the selected light fixture 3 has been memorised.

**[0028]** After this confirmation or "visual feedback", the above-mentioned operations are repeated cyclically for each light fixture 3, allowing the user to configure on the reference grid 13 all the light fixtures 3 present in the environment, thus realising the graphic map of selection and control (or synoptic diagram), in which each light fixture graphic element 3a represented on the reference grid 13 corresponds to a respective light fixture 3 located in the environment.

**[0029]** Once the configuration of the graphic map of control and selection of the light fixtures 3 has been completed, the user is able to interact with one or more light fixtures 3, selecting the corresponding light fixture graphic elements 3a represented in the reference grid 13 and regulating the operating status of the light fixture or fixtures 3 located in the environment with the control buttons 16a shown on the Touch Screen 16 corresponding to the graphic map of control and selection.

**[0030]** The system for the remote control of light fixtures 1 is also able to allow the user to select, by means of the graphic map of control and selection, a plurality of light fixture graphic elements 3a and to assign the corresponding light fixtures 3 to groups of light fixtures that can be simultaneously controlled.

**[0031]** In particular, with reference to figure 4, the processing device 7 of the remote control terminal 2, following a selection command given by the user, is able to download from the memory 8 and to display a second graphic interface 15 (illustrated in figure 4), which is suited to allow the user to assign each light fixture 3 located in the environment and associated with a light fixture graphic element 3a present on the graphic map to a respective group of light fixtures, which may be set by the user himself according to a plurality of possible scenes differing from one another.

**[0032]** In detail, as illustrated in figure 4, the second graphic interface 15 comprises, as well as the graphic map, a series of group selection buttons 17, each of which is suited to allow the user to command the assignment of one or more light fixtures 3 to a determined group of light fixtures; a series of scene selection buttons 18, each of which is suited to allow the user to configure each group of light fixtures according to a determined "scene", that is according to a determined condi-

tion of luminosity; and a series of luminosity regulating buttons 19 suited to allow the user to increase/decease selectively the intensity of the light produced by the group of light fixtures, that is of the lamps 4 belonging to the light fixtures 3 associated with a determined group of light fixtures.

**[0033]** Figure 5 shows a flow chart indicating an example of the operations implemented by the remote control system 1 for the formation of a group of light fixtures and for the configuration of the same according to a determined scene or state of luminosity. In this case too it is presumed that initially the lamps 4 of the light fixtures 3 are in OFF condition.

**[0034]** Initially the remote control terminal 2 displays the second graphic interface 15 (block 200) and the user is able to select, that is to activate manually on the graphic map, the light fixture graphic elements 3a for the light fixtures 3 to be assigned to a new group of light fixtures, for example the group A (block 210).

[0035] In this phase, the light fixture graphic element 3a selected by the user is activated, that is it goes preferably, but not necessarily, into a highlighted condition, (for example it increases its own degree of luminosity so as to stand out from the other light fixture graphic elements 3a not selected), and preferably but not necessarily the processing device 7, by means of the communication bus 6, gives the command to the lamps 4 of the corresponding selected light fixtures 3, to pass from OFF condition to ON condition so as to supply the user with the direct indication of the light fixtures 3 selected on the graphic map to be assigned to the group A (block 220).

**[0036]** At the end of selection, by pressing the group selection button 17 corresponding to the group A the user commands the processing device 7 to store in the memory 8 the identification codes  $C_P$  of the selected light fixtures 3 to be assigned to the group A (block 230). After the group selection button 17 has been pressed the light fixture graphic elements 3a of the graphic map return to rest condition (normal luminosity), that is non highlighted, and the corresponding light fixtures 3 pass from ON condition to OFF condition (block 240).

**[0037]** Once the light fixtures 3 have been assigned to the group of light fixtures, the user can configure it, according to a determined state of luminosity, that is according to a desired scene.

**[0038]** In this case the user selects on the Touch Screen 16 the group that he wants to configure, for example the group A, for example by pressing and holding down the group selection button (block 240).

**[0039]** At this point the processing device 7 downloads from the memory 8 the data concerning the identification codes  $C_P$  for the light fixtures 3 associated with the group A and activates, or puts into highlighted condition on the graphic map, the corresponding light fixture graphic elements 3a; at the same time, the lamps 4 of the light fixtures 3 of the group A pass from OFF condition to ON condition. At this point the user manually reg-

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ulates, by means of the regulating buttons 19 (block 250) present on the Touch Screen 16, the luminous intensity generated by the lamps 4 of the light fixtures 3 of the group A so as to bring it to a level corresponding to the desired scene. The scene may present, for example, a level of luminosity set for a reading environment, or for viewing projected television or film images, or for rest condition, or any other conditioned in which it is necessary to adapt the luminous intensity in the environment to suit a determined criterion.

**[0040]** Once the desired degree of luminous intensity has been reached, the user pressed the scene selection button 18 (scene A), and the processing device 7 commands the storage of the information concerning the degree of intensity associated with the light fixtures 3 corresponding to the group A according to the configuration of the scène A; at the same time, the lamps 4 of the light fixtures 3 belonging to the group A go into OFF condition (block 270).

**[0041]** After the above-mentioned configuration operations, the user can activate the pre-set scene for each group of light fixtures with the rapid scene selection buttons 21 present in a third graphic interface 20 illustrated in figure 6; in the particular case, when the rapid scene selection button 21 for the scene A is pressed, the remote control terminal 2 transmits through the communication bus 6 an activation signal codifying the identification codes C<sub>P</sub> of the light fixtures belonging to the group A and the information concerning the degree of luminous intensity associated with the scene A. The local control units 5 of the light fixtures 3 belonging to the group A receive the activation signal from the data communication bus 6, and according to this they command the activation of the respective lamp 4 according to the information contained in the activation signal, thus determining the required scene.

**[0042]** With reference to figure 7, the system for the remote control of light fixtures 1 is suited to supply, through the remote control terminal 2, the monitoring in "real time" of the operating status of each light fixture 3. **[0043]** In particular, the remote control terminal 2 is able to exchange, through the communication bus 6, a series of information with the local control units 5 to detect from the latter the operating status of the light fixtures 3, and it has the function of modifying each light fixture graphic element 3a present on the graphic map, according to the operating status of the repetitive light fixture 3, so as to be able to show the user the graphic map of the operating status of the light fixtures 3.

**[0044]** In the particular case, as better illustrated in figure 7, the processing device 7 is able to download from the memory 4 and display on the Touch Screen 16 a fourth graphic interface 23, in which each light fixture graphic element 3a located on the reference grid 13, changes its graphic representation according to the operating status of the respective light fixture 3 detected by the remote control terminal 2 through the exchange of information with the local control units 5.

[0045] For example on the graphic map of control and selection, each light fixture graphic element 3a can pass from the graphic representation of the type of lamp 4, indicating a condition of correct operation of the corresponding light fixture 3, to a graphic representation indicating a condition of malfunction of the same light fixture, which may preferably, but not necessarily, also indicate the cause of the fault; for example the light fixture graphic element 3a may indicate that the lamp has fused (indicated with the number 23a in figure 7), the presence of a short circuit (indicated with the number 23b), the condition of an interruption in the cable (indicated with the number 23c) and other possible types of faults.

[0046] With reference to the figures 1 and 8, the system for the remote control of light fixtures 1 may include preferably, but not necessarily, at least one device 30 for measuring the degree of luminosity in the environment, situated in the environment in which the light fixtures 3 are located and connected to the communication bus 6 to transmit to the latter a measuring signal  $\rm S_{MIS}$  indicating the degree of luminosity measured in the environment itself.

[0047] The remote control terminal 2 receive the measuring signal  $S_{\rm MIS}$  from the communication bus 6 and processes it to decode the degree of luminosity in the environment. Once the degree of luminosity in the environment has been obtained, the remote control terminal 2 is able to command the automatic increase/decrease (according to a series of predetermined operations implemented by the processing device 7) of the luminous intensity produced by the lamp 4 of each light fixture 3 according to the setting previously made by the user in a determined scene.

**[0048]** The system 1 allows the user to "assign" a determined group of light fixtures 3 to the measuring device 30 so as to regulate their luminous intensity selectively according to the measuring signal  $S_{MIS}$  supplied by the measuring device 30 itself.

[0049] For this purpose the processing device 7 commands the downloading from the memory 8 and the display of a fifth graphic interface 24 comprising the graphic map and at least one confirmation button 25 (indicated in figure 8 with "sensor 1") associated with the measuring device 30. The assigning of the light fixtures 3 to the measuring device 30 is done by manually selecting on the graphic map a series of light fixture graphic elements 3a and, by means of the confirmation button 25, confirming the assigning of the latter to the measuring device 30. The fifth graphic interface 24 also presents buttons for setting the level luminosity 26 suited to allow the manual setting of the degree of intensity of the light fixtures 3 associated with the measuring device 30.

**[0050]** In view of all that has been described above it should be specified that the number of measuring devices 30 present in the environment may be more than one and consequently it is possible to assign to each of them a respective group of lamps in such a way as to differentiate the degree of luminous intensity within the

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environment.

**[0051]** Moreover, the fifth graphic interface 24 can allow the user to position on the reference grid 13, by means of a positioning system similar to the one described above for the light fixtures, some sensor graphic elements (not illustrated) each of which is associated with and indicates a corresponding measuring device 30 present in the environment.

**[0052]** In this case the processing device 7 is able to associate a group of lamps automatically with a determined measuring device 30; in particular the processing device 7 detects on the reference grid 13 the light fixture graphic elements 3a located in a predetermined area around a corresponding sensor graphic element, and assigns them to the control of the measuring device 30 associated with that sensor graphic element.

**[0053]** The functioning of the system for the remote control of light fixtures 1 may be easily deduced from the above description and does not need any further explanations.

[0054] The system for the remote control of light fixtures 1 has the great advantage of being extremely simple to configure and to use; in fact the representation of the graphic map of control and selection allows the user to locate the position of the light fixture in an extremely practical and immediate way, and to perform any type of regulation of the operating parameters of a light fixture by simply selecting the respective light fixture graphic element 3a. Moreover, the positioning of the light fixtures 3 on the reference grid 13, that is the configuration of the graphic map of control is extremely simple, thanks both to the presence of the reference grid and to the search function and automatic assigning of the type of lamp corresponding to the light fixture 3 to be configured.

**[0055]** Lastly it is clear that modifications and variations may be made to the system for the remote control of light fixtures described herein without going outside the field of protection of the present invention.

[0056] In particular, the command device 11 of the system for the remote control of light fixtures 1 may be composed of a remote appliance (not illustrated) suited to allow the user to send commands from a distance to the remote control terminal 2. This remote appliance (not illustrated) comprises a command keyboard and a receiving and transmitting block (not illustrated) that is able to communicate and transmit the data that codify the commands, to a corresponding receiving and transmitting block (not illustrated) located in the remote control terminal 2 and connected to the processing device 7. The communication between the two receiving and transmitting blocks may be achieved by means of a communication system operating on a radio frequency or an infrared system.

**[0057]** Moreover, on the reference grid 13, each line and each column may be only partially displayed on the Touch Screen 16, corresponding to a predetermined portion of its own two ends.

#### Claims

- 1. System for the remote control of light fixtures (1) located in an environment, each of which comprises a lamp (4) and a local control unit (5) suited to control the operation of said lamp (4); said system (1) comprising a remote control terminal (2), and a data communication bus (6) connected to said remote control terminal (2) and to each said local control unit (5) to allow a bidirectional exchange of data between each said local control unit (5) and said remote control terminal (2); said system being characterised in that said remote control terminal (2) is provided with first means of interface (12) suited to display a reference grid (13) associated with the environment in which are located said light fixtures (3), and means of configuration (140, 150, 160), which are suited to detect the selection and assigning, by the user, of the position of at least one light fixture (3) on said reference grid (13), and to assign on said reference grid (13) in said selected position, a light fixture graphic element (3a) associated with a corresponding light fixture (3); said light fixture graphic elements (3a) and said reference grid (13) defining a graphic map displayed by said remote control terminal (3a), which is suited to allow the selection and the remote control of said light fixtures (3) located in the environment.
- 2. System according to claim 1, characterised in that said remote control terminal (2) comprises means of interrogation (110, 120, 130), which are suited to interrogate each light fixture (3) by means of said data communication bus (6) to receive from the corresponding local control unit (5) a number of lamp information associated with the respective lamp (4); said means of configuration (140,150,160) comprising means of research (150), which are suited to assign automatically to each said light fixture graphic element (3a) located on said reference grid (13), depending on said lamp information, an icon symbol indicating the type of lamp associated with the respective light fixture (3).
- 45 3. System according to claim 2, characterised in that said means of interrogation (110, 120, 130) comprise means of lamp activation (110), which are suited for selectively activating the lamp (4) of a said light fixture (3), before the configuration of the respective light fixture graphic element (3a) on said reference grid (13) by said user.
  - 4. System according to claim 2 or 3, characterised in that said means of configuration (140,150,160) comprise means of confirmation (160), which following said selection of said light fixture (3) on said reference grid (13) by the user, are suited to activate the lamp (4) of the corresponding light fixture (3) ac-

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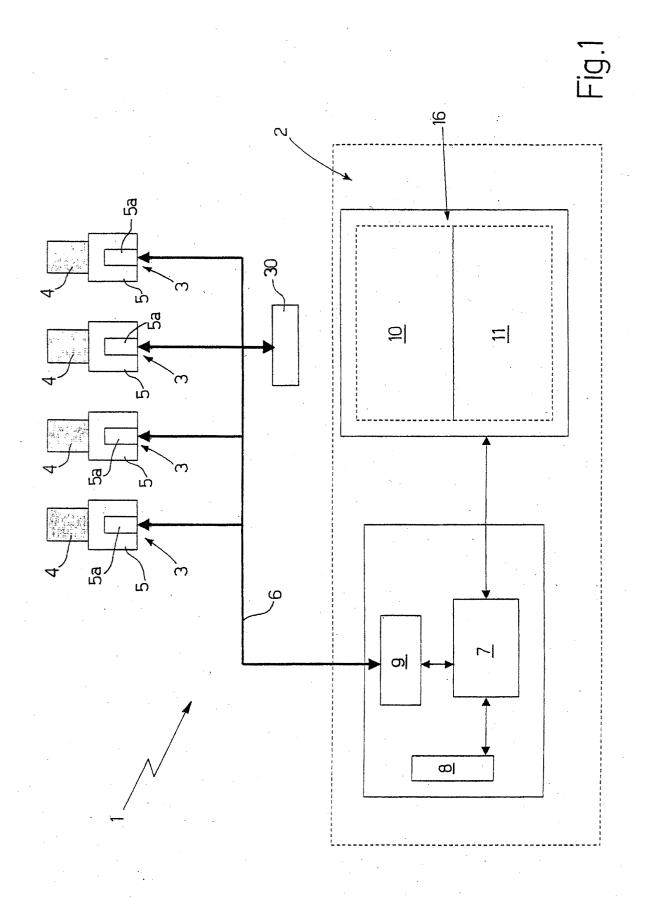
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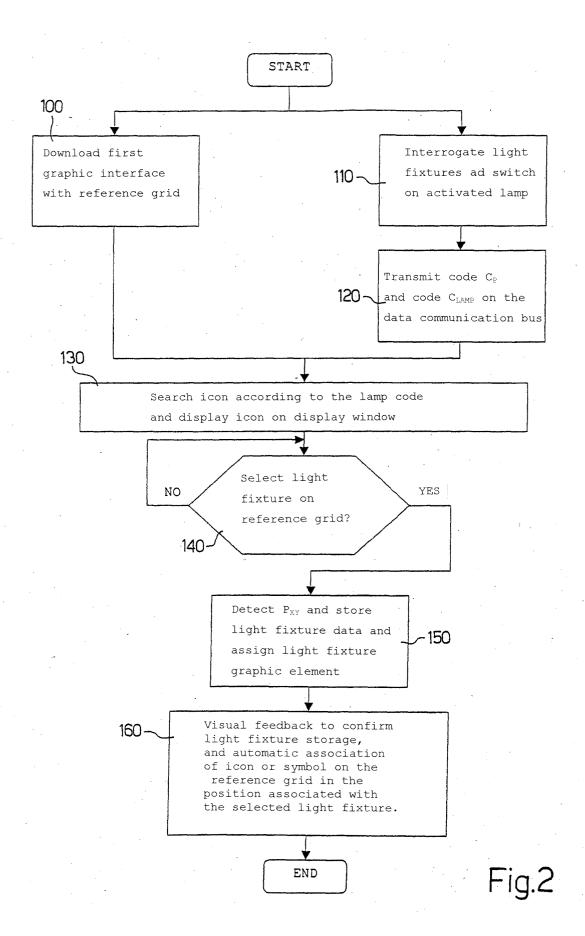
cording to a determined operating mode.

- 5. System according to any one of the previous claims, characterised in that said remote control terminal (2) comprises second means of interface (15) suited to display said graphic map for the control and selection of light fixtures, and means for configuring the group of light fixtures (210, 220, 230), which are suited to detect the light fixture graphic elements (3a) selected on said reference grid (13) by said user and to assign the corresponding light fixtures (3) to a determined group of light fixtures, which may be simultaneously controlled by means of said remote control terminal (2).
- 6. System according to claim 5, characterised in that said remote control terminal (2) comprises scene selection means (240,250,260), which are suited to assign to each group of light fixtures (3) a determined degree of luminous intensity.
- 7. System according to claim 6, characterised in that said remote control terminal (2) comprises third means of interface (20) comprising at least one plurality of command buttons (21), each of which is suited to allow the user to give a light fixture (3) or a group of light fixtures an operating status according to a predetermined scene.
- 8. System according to any one of the previous claims, characterised in that said remote control terminal (2) comprises means for detecting (7) the operating status of the light fixtures (3) suited to communicate with said local command units (5) to receive from the local command units (5) a number of information concerning the operating status of each light fixture (3); said remote control terminal (2) comprising fourth means of interface (23) presenting said graphic map, in which each said light fixture graphic element (3a) varies its own configuration according to the operating status of the respective light fixture (3).
- 9. System according to any one of the previous claims, characterised in that it comprises at least one device (30) for measuring the luminous intensity, which is located in the environment and is connected to said data communication bus (6) to transmit a signal codifying said detected luminous intensity; said remote control terminal (2) comprising fifth means of interface (24) presenting said graphic map and means for assigning the measuring device (30), which after the selection of said light fixture graphic elements (3a) by the user are suited to assign the corresponding light fixtures (3) to said measuring device (30).
- 10. System according to claim 9, characterised in that

said fifth means of interface (24) comprise means for the positioning on said reference grid (13) of sensor graphic elements corresponding to said measuring devices (30); said remote control terminal (2) comprising means of detection suited to detect on said reference grid (13) the light fixture graphic elements (3a) present in a predetermined area around a corresponding sensor graphic element, and means of assignment suited to assign to said recorded light fixture graphic elements (3a) said measuring device (30) associated with said sensor graphic element.

- **11.** System according to any one of the previous claims, **characterised in that** said data communication bus (6) implements a DALI communication protocol.
- **12.** System according to any one of the previous claims, characterised in that said remote control terminal (2) comprises a Touch Screen (16).
- 13. System according to any one of the previous claims, characterised in that it comprises means of command suited to allow the user to give commands to said remote control terminal (2); said means of command being suited to communicate with said remote control terminal (2) through a receiving and transmitting system operating on a radio frequency or an infrared system.
- 14. System according to claim 12 or 13, characterised in that each line and each column of said reference grid (13) may be only partially displayed on said Touch Screen (16) corresponding to a predetermined portion of its own ends.





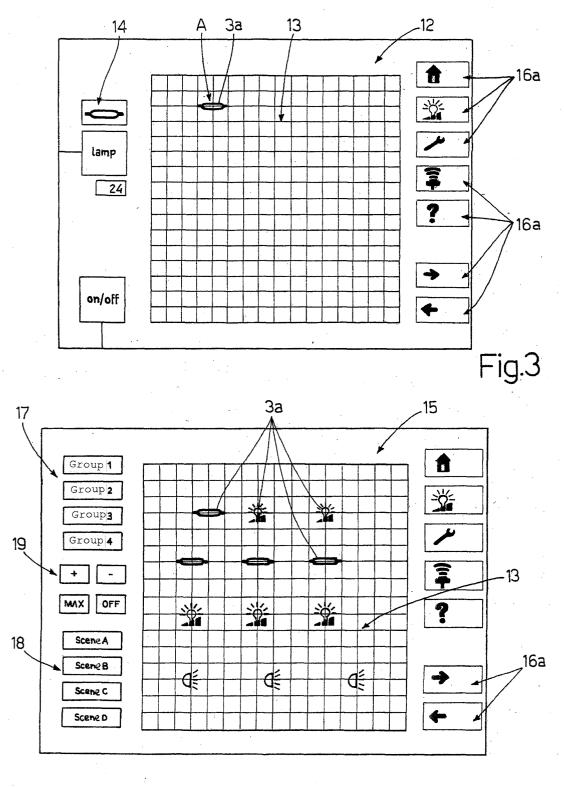


Fig.4

