



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
14.01.2009 Bulletin 2009/03

(51) Int Cl.:
G08C 17/02 (2006.01)

(21) Application number: **07290858.5**

(22) Date of filing: **09.07.2007**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
 Designated Extension States:
AL BA HR MK RS

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(54) **A system and related method for appliance control**

(57) The present invention relates to a control system for controlling at least one appliance (203₁, 203₂, 203_n). The control system comprises at least one appliance (203₁, 203₂, 203_n) and a central control platform (202) for controlling the appliance (203₁, 203₂, 203_n). The control system further comprises a control terminal (101;

201) which exchanges an identification (206) with an appliance (203₁, 203₂, 203_n) within the vicinity of the appliance (203₁, 203₂, 203_n), and thereupon automatically gets configured (207, 208) to be able to send control instructions (209) for the appliance (203₁, 203₂, 203_n) to the control platform (202).

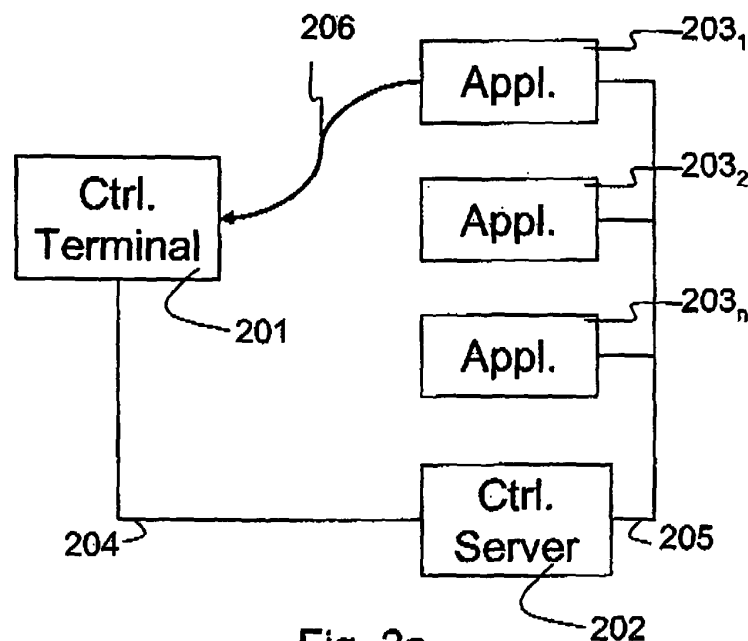


Fig. 2a

Description

Field of the Invention

[0001] The present invention generally relates to controlling appliances and more in particular to network-centric controlling of one or more appliances such as a TV set, heating, air conditioning, alarm, fire place, etc. from within the vicinity of those appliances.

Background of the Invention

[0002] Control systems such as home automation systems for houses provide a way of controlling a wide range of appliances in a house. A home automation system typically provides a network connecting a number of appliances, for instance a heater, lights, air conditioning, window blinds, etc, to a central controller such as a centralized computer. Such a centralized computer may be a dedicated device adapted to control the appliances connected to the home automation systems network or a personal computer which is used for entertainment and office applications, and which also supports interaction over the home automation systems network. This way, a user can control the devices or appliances in his house connected to the network from a single point. Controlling can be changing the current state of an appliance, for instance turning some lights on or off. Controlling can also involve configuring appliances, for instance the central heating, etc. In addition to the central controller, there may also be a remote control device that can be used by the residents to control the appliances or configure the appliances.

[0003] A central controller needs a way to identify each appliance before the latter can be controlled. Therefore, In a typical home automation systems network each appliance is provided with a unique identifier within the network. One particular example is the X10 protocol which can be used in a home automation systems system and of which the command codes are defined in a document entitled "Standard and Extended X10 Code Protocol" that can be retrieved via the link <ftp://ftp.x10.com/pub/manuals/xtddcode.pdf>. In the X10 protocol, each appliance is addressed by a house code and a device code. Together these make up a unique identifier of the appliance within the network. This means that each appliance has to be configured with a unique address which fits in the range of the home automation systems network (i.e. share the same house code as the other appliances in the building and have a unique device number). Thus, extensive configuration is required in buildings where a large number of appliances are to be controlled using the X10 protocol. Additionally, each device needs to be selected before it can be controlled. For instance by entering the house code and device code manually, selecting the appliance from a list of available appliances or selecting the appliance on a map or layout of the building. Selecting a device on a map is easy to do, however this requires a user to

be at the central controller. Selecting a device from a list can become difficult or slow as a user has to browse through a section of the list in order to find the desired appliance. Entering the appliance's house and device codes requires the user to be aware of the codes for each appliance. In conclusion, a system based on the X10 protocol with a central controller is cumbersome and rather user-unfriendly. In addition, disabled people may find it difficult to select a particular device using a central controller such as a computer with a touch screen or they may have troubles using the input devices to the central controller. Entering device codes manually is an error-prone system which results in controlling the wrong appliances. Selecting devices from a list or on a map is less error-prone but may still result in controlling the wrong devices, for instance when a user has problems reading the display of a central controller.

[0004] It is an objective of the present invention to provide a system and method for controlling networked appliances which is less cumbersome and less prone to errors than the known solutions.

Summary of the Invention

[0005] The above described drawbacks of the prior art are overcome and the objectives of the present invention are realized by a control system for controlling at least one appliance, the control system comprising at least one appliance and a central control platform for controlling the appliance and the control system further comprising a control terminal which comprises means for exchanging an identification between the appliance and the control terminal within the vicinity of the appliance, means for automatically configuring the control terminal to be able to send control instructions for the appliance to the control platform.

[0006] Indeed, by exchanging an identification between the appliance and the control terminal from within the vicinity of the appliance and by automatically configuring the control terminal to be able to send control instructions for the appliance, a single control terminal can be used to control one or multiple networked appliances and the user of the control terminal is able to see at any time instant in a very intuitive manner which device is under his control. The control platform may hold information related to each appliance, for instance status information, available control instructions or a user interface. Such information may then be retrieved by the control terminal from the control platform with an identification of the appliance and made available to the user to further enhance the user-friendliness. The control terminal is further able to interact with the control platform and to instruct the appliance through control instructions to change the state of a particular appliance.

[0007] In the light of the present invention, the vicinity of the appliance is related to the action radius of the used technology. For instance, if identification is done by physical contact between the control terminal and the appli-

ance by electrical contacts, then the vicinity is limited to the place where the electrical contacts are located. However, if identification is done using a wireless communication technology, the vicinity may be a few centimetres for very weak signals or short distance communication technology or may be up to a few meters for stronger signals. The identification is exchanged between the control terminal and the appliance. The control terminal may be able to retrieve an identification from the appliance which can be used to configure the control terminal, with or without interaction with the control platform. Alternatively, the appliance may be able to retrieve an identification from the control terminal which can then be used to automatically configure the control terminal directly or through the control platform.

[0008] The control platform may be a server located in a network whereto all the appliances are connected. The control platform has knowledge of all available control instructions for each of the appliances connected to the network and is able to transmit instructions to one or more of those appliances over the network. In addition to the available control instructions for the appliances, the control platform may also have knowledge of a user interface that can be used by a user to input instructions for the appliances. The network whereto the appliances and control platform are connected may be a private network within a building or multiple buildings or a public network such as the Internet. In case of the Internet, a producer of appliances may provide a list of available control instructions for his appliances which can then be sent to the appliance of a customer. In addition, the control platform may also be connected to the Internet to retrieve new instructions for appliances or retrieve information for newly added appliances.

[0009] An additional advantage of the control platform is that it can provide an overview of the entire control system to a control terminal. This can be done explicitly or may be used to respond to a control instruction. For instance, if a user sends an instruction to turn the air conditioning on in a room where the heater is set at high temperature, the control platform can notify the user of a conflicting situation. The control platform may also keep track of changes performed by users in a log that can be used to reverse certain instructions.

[0010] The appliances can be a wide range of devices and generally can be any device which can be electrically controlled. For instance the appliance can be a motor to open or close roller blinds, an electric switch for lights, a motor to open or close windows, air conditioning, etc. These appliances are further connected to a network and through the network to the control platform. In addition, these appliances provide a way to retrieve at least an identification of the appliances from within their vicinity. Of course, the appliances are not limited to devices that are electrically controlled. There may also be a mechanical or magnetic link between the control platform. In such case, the control instructions from the control terminal to the control platform can be converted into magnetic sig-

nals or mechanical movement which alter the state of the appliance. Alternatively, the control platform may send an electrical signal to an appliance where the signal is converted in magnetic or mechanical changes to control the appliance.

[0011] Optionally, the control system according to the present invention may further comprise at least a second appliance, at least a second central control platform for controlling the second appliance and a lookup function for locating the control platform related to the appliance for which a control instruction is sent by the control terminal.

[0012] Indeed, a large number of appliances may be under control of multiple control platforms. For instance in a large building there may be a central control platform for each floor. Another example is a single building wherein multiple companies reside and each company has its own central control platform for the appliances within their area. In these examples the maintenance team may have a control terminal which should be able to control all the appliances within a building. Therefore, a lookup function can be used to determine to which floor or company a particular appliance is related and thus to which control platform the instructions should be sent. Furthermore, the lookup function may be able to direct a control terminal to a specific control platform based on the identity of the user handling the control terminal or the person or company whereto the control terminal belongs. This way, multiple control platforms enable an authentication check to avoid controlling appliances for which a particular user is not authorized.

[0013] In general, the lookup function enables a single control terminal to control appliances related to various control platforms. The lookup function is able to inform the control terminal about the control platform that is responsible for a particular appliance. This enables the control terminal to interact with the appropriate control platform.

[0014] Optionally, the control platform in the present invention may further comprise means for providing user interface information and control instructions to a control terminal.

[0015] One of the advantages of a central control platform is that available user interfaces and/or control instructions for one or more appliances can be managed centrally. Thus, if the interface or instructions change for an appliance, only an update of the central control platform is needed. Similarly, if an appliance is added to the network and the new appliance is of a known type such as an appliance identical to other appliances already in use, the update of the control platform may be limited to creating a link between the identification of the new appliance and the available user interface and/or control instructions. In case a new appliance is of a new type, the central control platform may also require an update of the available control instructions and/or user interface. If the control terminal is able to retrieve the user interface and/or available control instructions from the control plat-

form, it can benefit from the updates made to the control platform. No updates are required to the control terminal when appliances are added or changed if the control terminal is able to retrieve the information from the control platform. This can also be an advantage when a control terminal is lost or destroyed. Only a new terminal is needed which can immediately be used to control the appliances. Another advantage of this approach is that existing control systems may easily be extended with a mobile control terminal. Only the control platform needs to be modified with the ability to communicate with the control terminal and the appliances need to be provided with a technology to allow their identification.

[0016] Of course, a control terminal may have the user interfaces embedded or may be able to generate all the available user interfaces based on limited information or instructions. In such case, the extension of an appliance and the addition or removal of an appliance may require a modification of the control terminals. An additional advantage of a user interface which is obtained from a central control platform is that a customized user interface can be stored on the control platform. This means that in case of multiple controllers, a user can access his personalized interface from each controller. Thus, user related settings can be shared between various controllers without modifying each controller with the settings. Such settings for a personalized user interface may relate to a background image or colour, audible feedback sounds, position of control instructions, etc.

[0017] Optionally, the appliance in the control system according to the present invention may comprise a token for storing an identification and the control terminal may comprise a token reader for reading the identification from the token, or vice versa.

[0018] The appliances can be identified from within the vicinity of the appliance by a control terminal. Therefore, the appliances need a way of providing their identification to the control terminal. The use of tokens which contain the identification and possible additional information in the appliances and a token reader in a control terminal to retrieve the information makes this possible. Token readers can automatically retrieve the information from the tokens in the appliances without user interaction. This is different from situations where no tokens are used but where for instance the user has to read an identification on an appliance and enter the identification manually into the control terminal. Of course the opposite is also possible, where each appliance contains a token reader and the control terminal contains a token. However, as token readers are often more expensive than tokens due to the required hardware to read tokens and process signals, it may be more beneficial to include a token in the appliance and a reader in the control terminal.

[0019] Tokens can be placed in a location which is not visible, for instance in a wall, in an appliance, etc. This way, it becomes harder to tamper or destroy the controls for an appliance which is publicly accessible. One example of this can be a gate which provides access to a build-

ing or a corporate site. Anyone with an appropriate terminal is able to open or close the gate, anyone else cannot even see the controls to the gate.

[0020] Optionally, the control system according to the present invention may be characterized in that the token and the token reader are based on one of the following:

- Radio Frequency Identification Technology;
- Near Field Communication Technology;
- Infrared Communication Technology; and
- Optical recognition technology;

[0021] All of these technologies are wireless communication technologies which enable communication between two devices such as a control terminal and an appliance. Each of these technologies has its own advantages and may be used in different scenario's. For instance Radio Frequency Identification (RFID) and Near Field Communication (NFC) are equivalent technologies which offer wireless information retrieval from within a particular range around a token without any restrictions in direction or line-of-sight requirements. Such technologies can be integrated at little cost and require little space or maintenance. For instance, each appliance can be provided with a tag and the control terminal can be provided with a tag reader. This way, the control terminal can read a tag whenever it is in range of the tag reader. Furthermore, technologies such as RFID and NFC allow for a concealed placement of the tags or tag readers. This way, the control elements for appliances can be hidden from view to create a better appearance of a room or building.

[0022] Technologies which are based on optical recognition such as bar codes or semacodes or optical communication such as infrared communication are alternative solutions to enable the identification of appliances. They are harder to conceal due to line-of-sight requirements. However, bar codes or semacodes may already be present on appliances, for instance for tracking during transport and production. Therefore, a reader for such codes enables the reuse of information. Another alternative optical recognition technology is the recognition of a shape to identify an appliance. For instance the overall shape of the appliance itself may be sufficient to identify the appliance, or a shape may be drawn or painted on or near the appliance itself. Of course, such techniques may be difficult to implement, for instance recognising the shape of an appliance may be difficult for large appliances where enough distance is required to capture the entire appliance or if an appliance such as an air conditioning is hidden or built into the building.

[0023] The present invention further relates to a control terminal for use in a control system for controlling at least one appliance, the control system comprising at least one appliance, a central control platform for controlling the at least one appliance and the control terminal, the control terminal comprises:

- means for exchanging an identification between the at least one appliance and the control terminal within the vicinity of the at least one appliance; and
- means for automatically configuring the control terminal to be able to send control instructions for the at least one appliance to the control platform.

[0024] The present invention further also relates to a central control platform for use in a control system for controlling at least one appliance, the control system comprising at least one appliance, the central control platform for controlling at least one appliance and a control terminal, characterized in that the central control platform comprises means for receiving a control instruction for at least one appliance from the control terminal, the control instruction being sent after automatic configuration of the control terminal based on an identification exchanged between the at least one appliance and the control terminal within the vicinity of at least one appliance.

[0025] The present invention further also relates to an appliance for use in a control system for controlling at least one appliance, the control system comprising at least one appliance, a central control platform for controlling the appliance and a control terminal, characterized in that the appliance comprises means for exchanging an identification with the control terminal within the vicinity of the appliance for automatic configuration of the control terminal enabling the control terminal to send control instructions to the control platform for the appliance.

[0026] The appliance identification can be provided by a visual recognition mark such as a drawing, symbol or number or with a token able to transmit and/or receive signals. For instance an RFID or NFC tag can be read by a tag reader to obtain the identification stored therein, visual markings such as a number or symbol may be recognized by a camera.

[0027] The drawbacks of the prior art are also overcome and the objectives of the present invention are also realized by a method for controlling an appliance in a control system comprising at least one appliance and a central control platform, wherein the method comprises the steps of:

- exchanging an identification between the appliance and the a control terminal within the vicinity of the appliance; and
- automatically configuring the control terminal to be able to send control instructions for the appliance to the control platform.

Brief Description of the Drawings

[0028]

Fig. 1 illustrates an embodiment of the control terminal 101 for use in a system according to the present

invention; and

Fig. 2a to 2c illustrate a message flow through an embodiment of the control system according to the present invention.

Detailed Description of Embodiment(s)

[0029] Fig. 1 illustrates a functional block scheme of an embodiment of the control terminal 101 according to the present invention. The control terminal 101 consists of a touch screen 102, a central processing unit (CPU) 103, a memory 104, an RFID tag reader 105 and a transceiver 106. This particular embodiment of the control terminal 101 has a touch screen 102 whereon a graphical user interface is shown. The touch screen 102 allows a user to select actions for an appliance by touch. The CPU 103 is able to retrieve information from the touch screen 102 such as which action is selected, and is able to process these actions. The CPU 103 is connected to each of the other components in the control terminal 101 and manages the communication between these components. The user interface can in this particular embodiment be embedded in the control terminal and can be stored in memory 104. In addition to the user interface, the memory module 104 may also contain all the available control instructions for all the known appliances or a subset thereof. The CPU 103 is also able to interact with the RFID tag reader 105 which is used to read RFID tags located on an appliance. In one embodiment, an RFID tag located on an appliance contains an X10 address made up out of a house code and a device code. The RFID reader 105 can then retrieve the X10 address for a particular appliance from near the appliance. The CPU 103 is thus able to determine the address of an appliance by simple touch or moving near the appliance. Based on the X10 address, CPU 103 can select a particular user interface from memory module 104 and instruct the touch display 102 to show that user interface. Finally, CPU 103 is able to transmit instructions towards a control platform using transceiver 106.

[0030] In this particular embodiment of control terminal 101, the transceiver 106 also enables the control terminal 101 to receive additional control instructions or graphical user interface options from the control platform. The CPU 103 reads such information from transceiver 106 and updates memory module 104 and/or touch screen 102 based on the received information. In addition to this, the control terminal 101 may also be able to personalize the layout on the touch screen 102, for instance based on a user identification which is performed when a user starts handling the control terminal 101. Personalized user interfaces may be stored in the memory module 104 or may be requested from the control platform using transceiver 106. A requested user interface may or may not be temporarily stored in memory module 104.

[0031] It should be noted that transceiver 106 may be connected to a wired or wireless communication interface. It may for instance be a wireless communication

transceiver able to operate according to WiFi standard specifications (IEEE 802.11 a/b/g), WiMax specifications or a propriety wireless communication technology. It may also be based on wired communication technology such as Ethernet, RS232, USB or a propriety interface. In a flexible environment, the transceiver may also be connected to wired and wireless interfaces and may be able to use one or more interfaces simultaneously.

[0032] Although this particular embodiment illustrates an RFID reader to obtain an identification from an appliance, it should be obvious that the RFID reader can be replaced with an RFID tag. In such case, the appliance may provide an RFID reader which retrieves an identification for the control terminal from the RFID tag in that control terminal. The appliance may then be able to provide information related to available control instructions and/or user interface options to the control terminal. Alternatively, the appliance may provide the control terminal identification to the central control platform which in turn can provide information to the control terminal.

[0033] Fig. 2a illustrates a general system layout of a control system according to the present invention consisting of a control terminal 201, a control server 202 and multiple appliances 203₁ to 203_n. The control server 202 is connected to the appliances 203₁ to 203_n through a wired communication network 205. The communication network 205 can support a wide number of communication protocols, and in this particular example is based on the X10 protocol which is typically used in home automation systems. The control terminal 201 is further connected to the control server 202 by a wireless communication technology, in this particular embodiment a WiFi connection 204 based on the IEEE 802.11g standard specification. Fig. 2a further illustrates the first step in controlling an appliance 203₁ with arrow 206. Arrow 206 indicates the retrieval of the identification of the appliance from the appliance 203₁ by moving the control terminal 201 near the appliance 203₁. In this particular example, the control terminal 201 retrieves the X10 protocol address for appliance 203₁.

[0034] Fig. 2b shows how the control terminal 201 transmits the identification to the control server 202 through arrow 207. The control server 202 can then use this identification of appliance 203₁ to determine all the available command instructions for the appliance 203₁. For instance, if the appliance 203₁ is a light bulb, the available commands can be "on" or "off" or "dim". In case the appliance is an air conditioning, the command instructions become more complex such as "raise temperature", "lower temperature", "on", "off", "manual operation" or "automatic operation". The control server 202 sends information on the available command instructions to the control terminal 201 as is indicated by arrow 208. Upon receipt of these instructions, control terminal 201 shows a user interface with the available control instructions. A user can then select the desired action such as opening or closing the window blinds.

[0035] As is illustrated by Fig. 2c, the control terminal

201 processes the selection of the user and transmits the control instruction to the control server 202 as is indicated by arrow 209. Once the control server 202 is aware of the user input, it sends a corresponding control instruction to the appropriate appliance as is indicated by arrow 210.

[0036] In an alternative embodiment, arrow 208 may also indicate the elements of the user interface which are sent from the control server 202 to the control terminal 201, in addition to the available control instructions. In yet another alternative embodiment, the control terminal 201 may be aware of the available control instructions for the appliances and use the control server 202 as a gateway to the appliances.

[0037] This particular example was described using the X10 protocol, however the control server may be able to send instructions using various protocols. The control terminal may indicate which protocol is used on the control network, for instance with a parameter in the communication between control terminal and control server. Alternatively, the control server is able to determine which protocol is needed for a particular appliance based on the address or request received from the control terminal. In addition, communication between the control server and the control terminal may use a protocol different from the protocol for communication between the control server and the appliances. For instance, there may be a general protocol indicating available instructions where the control server then translates these instructions to the appropriate control protocol such as X10 or Lonworks.

[0038] Although the present invention has been illustrated by reference to specific embodiments, it will be apparent to those skilled in the art that the invention is not limited to the details of the foregoing illustrative embodiments, and that the present invention may be embodied with various changes and modifications without departing from the spirit and scope thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein. In other words, it is contemplated to cover any and all modifications, variations or equivalents that fall within the spirit and scope of the basic underlying principles and whose essential attributes are claimed in this patent application. It will furthermore be understood by the reader of this patent application that the words "comprising" or "comprise" do not exclude other elements or steps, that the words "a" or "an" do not exclude a plurality, and that a single element, such as a computer system, a processor, or another integrated unit may fulfil the functions of several means recited in the claims.

Claims

1. A control system for controlling at least one appliance (203₁, 203₂, 203_n), said control system comprising said at least one appliance (203₁, 203₂, 203_n) and a central control platform (202) for controlling said appliance (203₁, 203₂, 203_n),
characterized in that said control system further comprises a control terminal (101; 201) comprising:
 - means for exchanging (105) an identification between said appliance (203₁, 203₂, 203_n) and said control terminal (101; 201) within the vicinity of said appliance (203₁, 203₂, 203_n);
 - means for automatically configuring said control terminal (101; 201) to be able to send control instructions for said appliance (203₁, 203₂, 203_n) to said control platform (202).
2. The control system according to claim 1, **characterized in that** said control system further comprises:
 - at least a second appliance;
 - at least a second central control platform for controlling said second appliance; and
 - a lookup function for locating the control platform related to the appliance for which a control instruction is sent by said control terminal (101; 201).
3. The control system according to claim 1, **characterized in that** said control platform (202) further comprises means for providing information on the available user interface options and/or control instructions to said control terminal (101; 201).
4. The control system according to claim 1, **characterized in that** said appliance (203₁, 203₂, 203_n) comprises a token for storing said identification and that said control terminal (101; 201) comprises a token reader for reading said identification from said token, or vice versa.
5. The control system according to claim 4, **characterized in that** said token and said token reader are based on one of the following:
 - Radio Frequency Identification Technology;
 - Near Field Communication Technology;
 - Infrared Communication Technology; and
 - Optical recognition technology;
6. A control terminal (101; 201) for use in a control system for controlling at least one appliance (203₁, 203₂, 203_n), said control system comprising said at least one appliance (203₁, 203₂, 203_n), a central control platform (202) for controlling said at least one appliance (203₁, 203₂, 203_n) and said control terminal (101; 201),
characterized in that said control terminal (101; 201) comprises:
 - means for exchanging (105) an identification between said at least one appliance (203₁, 203₂, 203_n) and said control terminal (101; 201) within the vicinity of said at least one appliance (203₁, 203₂, 203_n); and
 - means for automatically configuring said control terminal (101; 201) to be able to send control instructions for said at least one appliance (203₁, 203₂, 203_n) to said control platform (202).
7. A central control platform (202) for use in a control system for controlling at least one appliance (203₁, 203₂, 203_n), said control system comprising said at least one appliance (203₁, 203₂, 203_n), said central control platform (202) for controlling said at least one appliance (203₁, 203₂, 203_n) and a control terminal (101; 201),
characterized in that said central control platform (202) comprises means for receiving a control instruction for said at least one appliance (203₁, 203₂, 203_n) from said control terminal (101; 201), said control instruction being sent after automatic configuration of said control terminal (101; 201) based on an identification exchange between said at least one appliance (203₁, 203₂, 203_n) and said control terminal (101; 201) within the vicinity of said at least one appliance (203₁, 203₂, 203_n).
8. An appliance (203₁, 203₂, 203_n) for use in a control system for controlling at least one appliance (203₁, 203₂, 203_n), said control system comprising said at least one appliance (203₁, 203₂, 203_n), a central control platform (202) for controlling said appliance (203₁, 203₂, 203_n) and a control terminal (101; 201),
characterized in that said appliance (203₁, 203₂, 203_n) comprises means for exchanging an identification with said control terminal (101; 201) within the vicinity of said appliance (203₁, 203₂, 203_n) for automatic configuration of said control terminal (101; 201) enabling said control terminal (101; 201) to send control instructions to said control platform (202) for said appliance (203₁, 203₂, 203_n).
9. A method for controlling an appliance (203₁, 203₂, 203_n) in a control system comprising at least one appliance (203₁, 203₂, 203_n) and a central control platform (202) for controlling said at least one appliance (203₁, 203₂, 203_n), **characterized in that** said method composes the steps of:
 - exchanging an identification (206) between said appliance (203₁, 203₂, 203_n) and a control terminal (101; 201) within the vicinity of said appliance (203₁, 203₂, 203_n); and

- automatically configuring (207, 208) said control terminal (101; 201) to be able to send control instructions (209) for said appliance (203₁, 203₂, 203_n) to said control platform (202).

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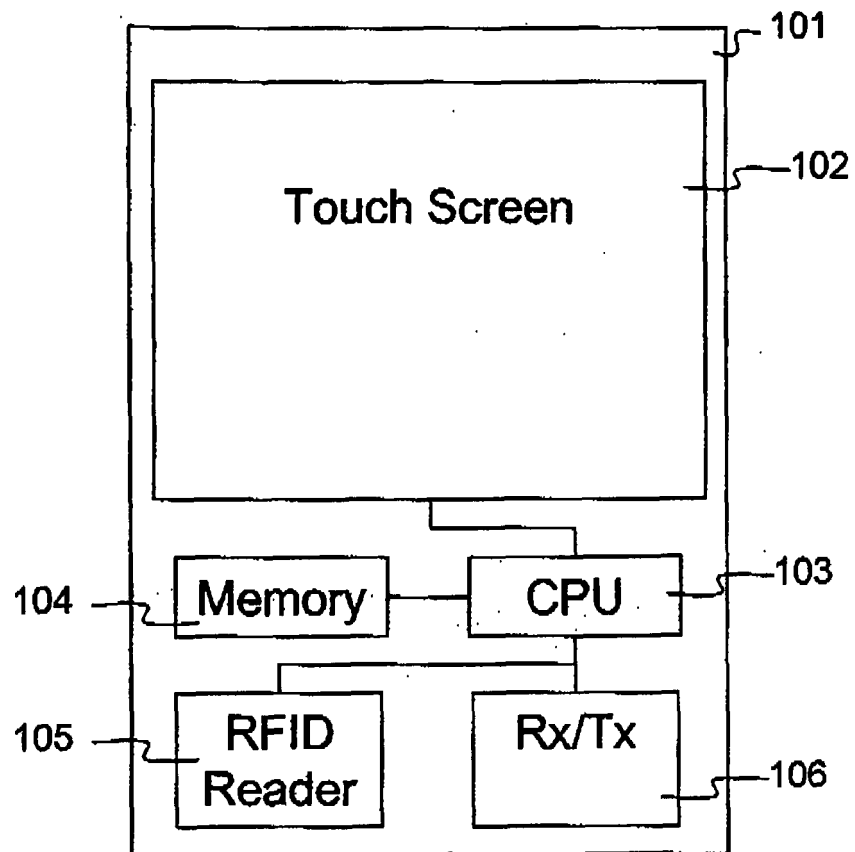


Fig. 1

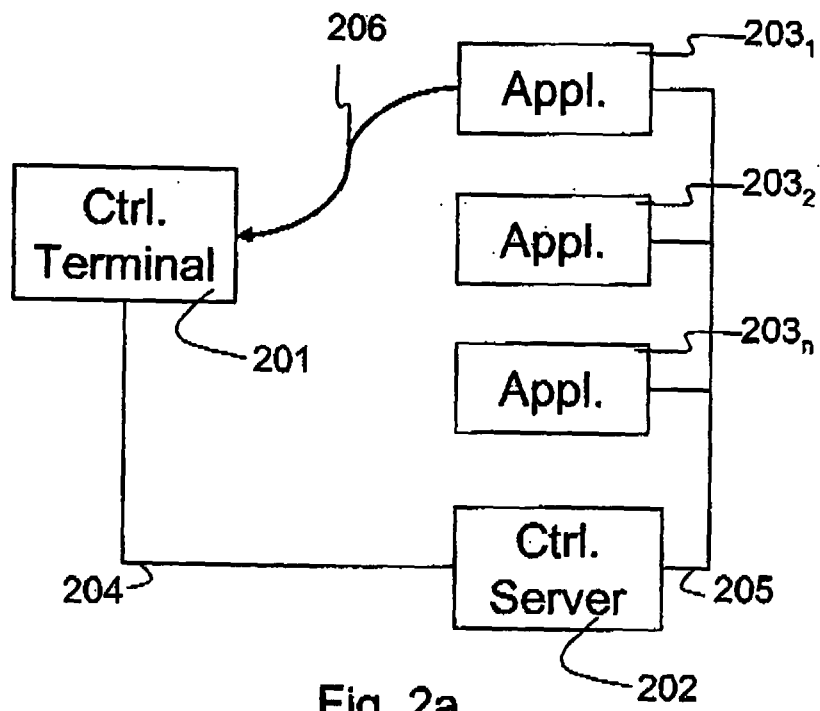


Fig. 2a

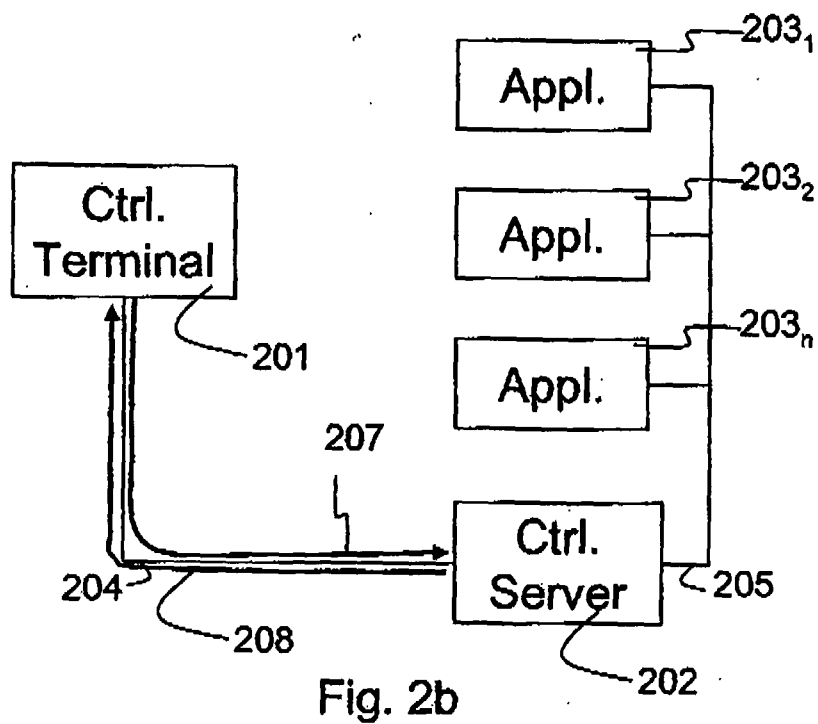


Fig. 2b

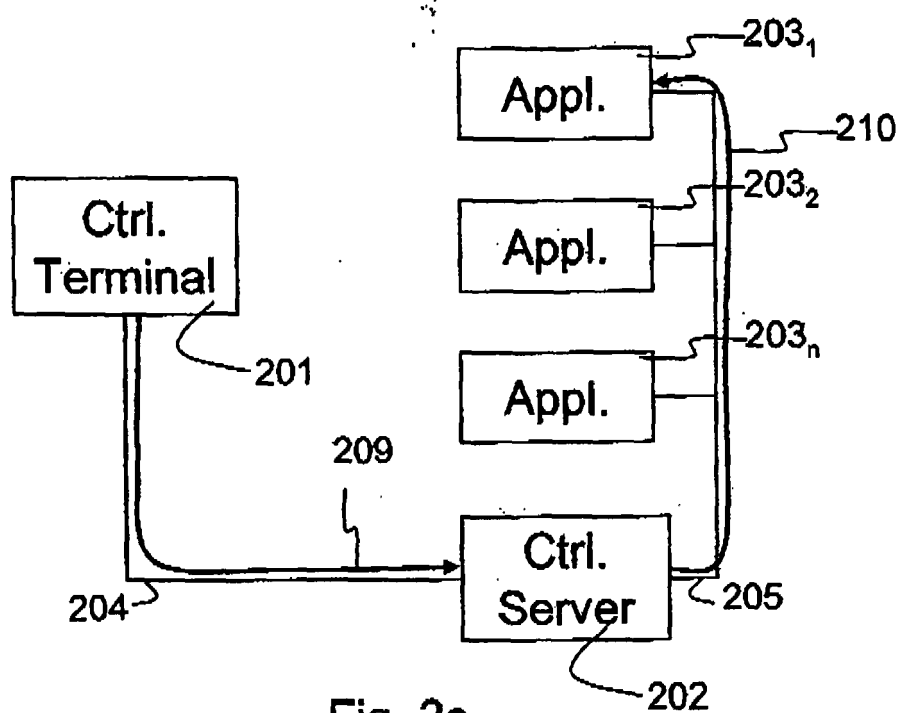


Fig. 2c



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 29 0858

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2007/025879 A (SIEMENS AG [DE]; GROSS STEFAN [DE]) 8 March 2007 (2007-03-08) * page 2, line 8 - page 4, line 21 *	1-9	INV. G08C17/02
X	US 2004/201602 A1 (MODY RASHESH C [US] ET AL) 14 October 2004 (2004-10-14) * paragraph [0017] * * paragraph [0024] * * paragraph [0039] *	1,2,4-9	
			TECHNICAL FIELDS SEARCHED (IPC)
			G08C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 November 2007	Examiner Pham, Phong
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 29 0858

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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30-11-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007025879 A	08-03-2007	DE 102005041862 A1	22-03-2007
US 2004201602 A1	14-10-2004	NONE	

EPO FORM P0459

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