Appeal decision

Appeal No. 2016-13940

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The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2011-285345, entitled "Systems, methods, and apparatus for providing energy management utilizing a power meter" [laying open of application on Jul. 26, 2012: Japanese Unexamined Patent Application Publication No. 2012-141307] has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The present application is an application in foreign language whose application date was Dec. 27, 2011 (priority claim under the Paris Convention of Jan. 4, 2011 (hereinafter, referred to as "Priority date"), the United States), and whose translation was submitted on Feb. 27, 2012. The scope of claims was amended on Dec. 17, 2014, the reasons for refusal were notified on Oct. 9, 2015, the scope of claims was amended on Jan. 15, 2016, and decision of refusal was made on May 9 of the same year. Against this, appeal against an examiner's decision of refusal was demanded on Sep. 16 of the same year, and, at the same time, the scope of claims was amended.

No. 2 Decision to Dismiss Amendment

[Conclusion of Decision to Dismiss Amendment]

The amendment of Sep. 16, 2016 (hereinafter, referred to as "the Amendment") shall be dismissed.

[Reason]

1 Details of the Amendment

(1) Statements of claims after the Amendment

By the Amendment, claim 1 of the scope of claims was amended as follows (underlines indicate amended portions).

"A method (100), comprising:

receiving (210), by a power meter (105) in communication with an external device (120), a request for a graphical user interface associated with at least one of (i) an operation of the power meter (105) and (ii) provision of electrical power to one or more loads;

generating (215), by the power meter (105) based at least in part on the received request, information associated with the graphical user interface;

communicating (220), by the power meter (105) to the external device (120), the generated information associated with the graphical user interface;

collecting (205), by the power meter (105), information associated with (i) the operation of the power meter (105) and (ii) one or more devices connected to the power meter (105) via a communication network; and

indicating information associated with the graphical user interface to a user using the one or more devices, wherein

the information associated with the graphical user interface is generated using at least a part of the collected information, wherein

the one or more devices include a utility meter (150) including a gas meter and/or a water meter, and wherein

the collecting (205) information includes collecting at least one of (i) an age of the power meter (105), (ii) identification information for the power meter (105), (iii) information associated with one or more environmental conditions, (iv) status information for one or more buttons associated with the power meter (105), (v) phase loading information associated with the power meter (105), (vi) status information for one or more load control relays, (vii) information associated with an operation of a utility meter (150) in communication with the power meter (105), (viii) information associated with an electrical load profile, and (ix) information associated with provision of power to one or more external loads."

(2) Claims before the Amendment

The statement of claim 1 of the scope of claims according to the amendment of Jan. 15, 2016 before the Amendment is as follows.

"A method (100), comprising:

receiving (210), by a power meter (105) in communication with an external device (120), a request for a graphical user interface associated with at least one of (i) an operation of the power meter (105) and (ii) provision of electrical power to one or more loads;

generating (215), by the power meter (105) based at least in part on the received request, information associated with the graphical user interface;

communicating (220), by the power meter (105) to the external device (120), the generated information associated with the graphical user interface;

collecting (205) information associated with (i) the operation of the power meter (105) or (ii) at least one of one or more devices connected to the power meter (105); and

indicating information associated with the graphical user interface to a user using the one or more devices, wherein

the information associated with the graphical user interface is generated using at least a part of the collected information, and wherein

the collecting (205) information includes collecting at least one of (i) an age of the power meter (105), (ii) identification information for the power meter (105), (iii) information associated with one or more environmental conditions, (iv) status information for one or more buttons associated with the power meter (105), (v) phase loading information associated with the power meter (105), (vi) status information for one or more load control relays, (vii) information associated with an operation of a utility meter (150) in communication with the power meter (105), (viii) information associated with an electrical load profile, and (ix) information associated with provision

of power to one or more external loads."

(3) The above amendment performs

(A) limitation, regarding "one or more devices" described in claim 1 before the Amendment, in a point that they are "connected via a communication network" to the power meter (105) and in a point to include "a utility meter (150) including a gas meter and/or a water meter," and, in addition,

(B) limitation, regarding "collecting (205) information," from the statement of "collecting (205) information associated with (i) the operation of the power meter (105) or (ii) at least one of one or more devices connected to the power meter (105)" of claim 1 before the Amendment to "collecting (205), by the power meter (105), information associated with (i) the operation of the power meter (105) and (ii) one or more devices connected to the power meter (105) via a communication network."

Therefore, regarding claim 1, the Amendment falls under the category of ones for the purpose of restriction of the scope of claims of Article 17-2(5)(ii) of the Patent Act.

2 Propriety of the Amendment

Then, whether the appellant can be granted a patent independently for the invention described in the afore-mentioned claim 1 after the Amendment (hereinafter, referred to as "the Amended Invention) at the time of filing of the patent application (whether it complies with the provisions of Article 126(7) of the Patent Act as applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the same Act) will be examined.

(1) The Amended Invention

The Amended Invention is as described in the above-mentioned "1" "(1) Statements of claims after the Amendment."

(2) Cited Document and Cited Invention

A Cited Document 1

In Japanese Unexamined Patent Application Publication No. 2010-96777 that was cited in the reason for refusal of Examiner's decision and is a publication distributed before the Priority date for the present application, (hereinafter, referred to as "Cited Document 1"), there are the following statements together with figures (underlines are provided by the body).

(A) "[0001]

The present invention relates to a power monitoring system."

(B) "[0010]

According to this invention, an electric power amount for each branch electric path in a home is capable of being monitored, and, by identifying electric equipment or a room consuming electric power wastefully, it is possible to perform specific operation such as stopping, turning off of a light, and power off for the purpose of saving energy. Furthermore, since association between a branch breaker and name information of a monitoring control means is conducted automatically, work for associating manually (for example, registration of a monitoring control means, registration of a terminal to which electric equipment is connected and so on) can be saved, and occurrence of a not-operable state due to registration error can be reduced."

(C) "[0026]

(Embodiment 1)

A power monitoring system of the present embodiment includes, as shown in FIG. 2: an integrated control board 1 installed in a home; a plurality of pieces of electric equipment Xmn (m=1, 2, ..., n=1, 2, ...) installed in a home, such as lighting equipment, an air conditioner, floor heating equipment, and IH equipment, which are connected to the integrated control board 1 via an electric path Lp to supply a commercial power source and an information transmission path Lj (a LAN cable of the enhanced category 5 or the category 6) and whose electric power supply, control, and monitoring is performed by the integrated control board 1; and a plurality of (two in the illustrated example) terminal devices (terminal devices having a function of a Web browser such as a personal computer PC and a display control device CV) connected to the integrated control board 1 via the LAN cable Li, and the integrated control board 1 and the terminal devices configure a home network that uses a general-purpose communication protocol (TCP/IP, UDP, HTTP, and the like). This home network is a local area network (LAN) conforming to the 100BASE-TX (IEEE802.3u) standards, and, in the integrated control board 1, terminal devices that correspond to the network terminals (the personal computer PC and the display control device CV) and the like are connected to an integration device TM that will be described later and that corresponds to a layer 2 switch or a layer 3 switch in a star-wired manner. In addition, the integration device TM has an Internet connecting function appropriate for the type of a line for connecting to the Internet (a telephone line, a CATV line, an optical fiber line, and the like), and the home network is coupled to the Internet that is an exterior network. Meanwhile, the display control device CV should just be an Internet TV and the like having a Web browser function and the like.

[0027]

A center device (center server) SV installed in a distant place distant from the residential house is connected to the home network through the Internet, and, as will be

indicated later, by performing data communication between a mobile terminal device PT, which has a Web browser function and which is made up of a notebook-size personal computer, a cellular phone handset, a PDA (Personal Digital Assistance), or the like connectable to the Internet, and the center device SV via the Internet, it is possible to perform control and monitoring of in-home electric equipment from a place away from home using the portable terminal PT, for example. The center device SV is constituted of a general-purpose computer apparatus having a network function, and has a function to relay a message to the integrated control board 1 transmitted from the portable terminal PT through the Internet and a message transmitted from the integrated control board 1 to a terminal device that does not belong to the home network. In this regard, however, the portable terminal PT and the center device SV that have an Internet connecting function as described above are conventionally well-known, and, therefore, illustration and explanation regarding the detailed configuration is omitted.

[0028]

As shown in FIG. 1, the integrated control board 1 includes: a main breaker Bs to receive commercial power supply supplied from the outside to a residential house at its primary side; a plurality of branch breakers Bmn inserted between electric paths branching from the secondary side of the main breaker Bs; an energy management unit 2; the integration device TM; and an electric-equipment controller C1. Then, each of the electric paths Lpmn branching via the branch breakers Bmn is led to outside the integrated control board 1 and connected to each electric equipment Xmn to supply operation power.

[0029]

The energy management unit 2 has a function to detect an electric power amount supplied through each of the branch breakers Bmn for each of the branch breakers Bmn, and generate image data for displaying detected data for each of the branch breakers Bmn. The energy management unit 2 includes: a main current detection unit CTs to measure a value of a main current flowing in the main breaker Bs at regular intervals; an

electric power calculation unit 2a to calculate a main electric power amount supplied through the main breaker Bs by converting a measurement value of the main current to an electric power amount; branch current detection units CTmn to detect a value of branch current flowing each of the branch breakers Bmn for each branch breaker at regular intervals; a calculation unit 2b to receive the main electric power amount calculated by the electric power calculation unit 2a and branch current measured by each of the branch current detection units CTmn, and calculate a branch electric power amount supplied via each of the branch breakers Bmn based on each branch current; and a control unit 2c to generate, based on the main electric power amount and the branch electric power amount inputted from the calculation unit 2b, image data indicating a main electric power amount and a branch electric power amount.

[0030]

The above-mentioned control unit 2c stores data on the branch breakers Bmn for which detection of an electric power amount is performed (such as the name of a branch breaker: branch 1, branch 2, ...and the like) in advance, and has a function (web server function) to generate web content (web page) as image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power) and, in response to a request from a terminal device, provide (deliver) a relevant web content to the terminal device. The integration device TM, the electric-equipment controller C1, and the like in the integrated control board 1 are connected to it via LAN cables."

(D) "[0056]

Next, the integration device TM in FIG. 1 is connected, through LAN cables, to a control unit 2c and the electric-equipment controller C1 within the board, and to the personal computer PC and the display control device CV outside the board, and, in conjunction with this, is connected to the center device SV and a cellular phone handset MP, or other terminal devices through the Internet. The integration device TM has a

packet processing function, a path switching function, a network security function, a function of a control point of UPnP (Universal Plug and Play), and the like, and controls data sending and receiving in the network."

(E) "[0058]

In a power monitoring system configured as above, a message of a power monitoring request is transmitted to the energy management unit 2 from a terminal device such as the personal computer PC and the display control device CV in a home or from the portable terminal PT connected to the Internet, and, when the control unit 2c of the energy management unit 2 receives the power monitoring request via the integration device TM, image data for power monitoring generated in the control unit 2c are transmitted, via the integration device TM, to the terminal device that has transmitted the power monitoring request.

[0059]

In the terminal device such as the personal computer PC, the display control device CV, or the portable terminal PT that has received the image data, the relevant image data are displayed on a monitoring screen of each terminal device, and thus a main electric power amount and a branch electric power amount for each of the branch breakers Bmn can be monitored. FIG. 8 indicates an image for branch power monitoring that has been displayed in a terminal device, and a branch electric power amount for each of the branch breakers Bmn is indicated by a bar graph G1. Meanwhile, in the monitoring screen of an electric power amount, there are provided, besides the graph indication of an electric power amount, a time and date display, a menu button for transition to a menu screen, a previous page button and a subsequent page button for transition to the previous page and the subsequent page, a history button for indicating data of an electric power amount in the past, and the like.

[0060]

In this way, since an electric power amount being supplied can be monitored for each of the branch breakers Bmn, a branch electric power system consuming electric power wastefully can be identified, and thus a user can achieve energy saving easily, by performing specific operation such as stopping, or turning off of a light to electric equipment Xmn connected to the identified branch electric power system.

[0061]

Furthermore, in the present embodiment, the names of the electric equipment Xmn or the rooms Rn corresponding to the branch breakers Bmn can be inputted using a terminal device such as the personal computer PC, the display control device CV, or the portable terminal PT. Hereinafter, this name input function will be described.

[0062]

First, in the terminal device, in a state that a monitor screen of a branch electric power amount shown in FIG. 8 is made to be displayed, an equipment name (for example, an air conditioner, a floor heating, IH equipment, and the like), or a room name (for example, a living room, a kitchen, a bathroom, and the like) is inputted after selecting a display area M1 of the branch breakers Bmn for performing name input.

[0063]

Then, data of the branch breakers Bmn corresponding to the selected area M1 (the name of a branch breaker: branch 1, branch 2, ...and the like) and the inputted equipment name or the room name are transmitted from the terminal device to the energy management unit 2. The control unit 2c that has received the above-mentioned data via the integration device TM stores the data in a manner making each name correspond to the branch breakers Bmn. After that, when the control unit 2c generates image data for monitoring branch power, the image data are generated with reference to an equipment name or a room name corresponding to each of the branch breakers Bmn, and an image for branch power monitoring that is displayed in the terminal device becomes, as shown in FIG. 9, an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2. Therefore, it is

possible to recognize at a glance that each branch electric power amount indicated is a power consumption amount of which electric equipment, or a power consumption amount of which room."

(F) "[0078]

Meanwhile, it is possible to unify systems if a power monitoring system of the present invention is incorporated in a household equipment monitoring control system that performs control and monitoring of household equipment such as security equipment via a home network and the Internet."

From these, it is recognized that there is described in Cited Document 1 the following invention (hereinafter, referred to as "Cited invention").

"A power monitoring system, comprising: an integrated control board 1 installed in a home; a plurality of pieces of electric equipment Xmn (m=1, 2,..., n=1, 2,...) that are installed in a home and connected to the integrated control board 1 via an electric path Lp supplying commercial power supply and an information transmission path Lj (LAN cable), and for which the integrated control board 1 performs electric power supply, control, and monitoring, wherein an integration device TM in the integrated control board 1 has an Internet connecting function according to types of lines for connecting to the Internet, and a home network is connected to the Internet that is an outside network (from paragraph [0026]), wherein

control and monitoring of in-home electric equipment can be performed from a place away from home using a mobile terminal device PT that is composed of a cellular phone handset and the like having a Web browser function and is connectable to the Internet (from paragraph [0027]), wherein

the integrated control board 1 includes the main breaker Bs to receive commercial power supply supplied from the outside to a residential house at its primary

side, a plurality of branch breakers Bmn inserted between electric paths branching from the secondary side of the main breaker Bs, an energy management unit 2, and the integration device TM, and, then, each of the electric paths Lpmn branching via the branch breakers Bmn is led to outside the integrated control board 1 and connected to each piece of electric equipment Xmn to supply operation power (from paragraph [0028]), wherein

the energy management unit 2 has a function to detect an electric power amount supplied through each of the branch breakers Bmn for each of the branch breakers Bmn, and generate image data for displaying detected data for each of the branch breakers Bmn, and includes a control unit 2c to generate, based on a main electric power amount and a branch electric power amount, image data indicating the main electric power amount and the branch electric power amount (from paragraph [0029]), wherein

the control unit 2c stores data of the branch breakers Bmn that perform detection of an electric power amount (such as the name of a branch breaker: branch 1, branch 2, ...and the like) in advance, and has a function (web server function) to generate web content (web page) as image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power) and, in response to a request from a terminal device, provide (deliver) the relevant web content to the terminal device, and the integration device TM in the integrated control board 1 is connected to it (from paragraph [0030]), wherein

the integration device TM is connected to the control unit 2c within the board, and is connected to a cellular phone handset MP or other terminal devices through the Internet, and controls data sending and receiving in a network (from paragraph [0056]), wherein

in a power monitoring system, a message of a power monitoring request is transmitted to the energy management unit 2 from a terminal device such as a portable terminal PT, and, when a control unit 2c of the energy management unit 2 receives the power monitoring request via the integration device TM, image data for power

monitoring generated in the control unit 2c are transmitted, via the integration device TM, to the terminal device that has transmitted the power monitoring request (from paragraph [0058]), wherein

in the terminal device such as the portable terminal PT that has received the image data, the relevant image data is displayed on a monitoring screen of each terminal device, and thus a main electric power amount and a branch electric power amount for each of the branch breakers Bmn can be monitored, an image for branch power monitoring that has been displayed in the terminal device indicates a branch electric power amount for each of the branch breakers Bmn by a bar graph G1, and, in the monitoring screen of an electric power amount, there are provided, besides the graph indication of an electric power amount, a time and date display, a menu button for transition to a menu screen, a previous page button and a subsequent page button for transition to the previous page and the subsequent page, a history button for indicating data of an electric power amount in the past, and the like (from paragraph [0059]), wherein

the names of the electric equipment Xmn or the rooms Rn corresponding to the branch breakers Bmn can be inputted using a terminal device such as the portable terminal PT (from paragraph [0061]), wherein

the control unit 2c stores each name in a manner making it correspond to the branch breakers Bmn, and subsequently, when the control unit 2c generates image data for monitoring branch power, the image data are generated with reference to an equipment name or a room name corresponding to each of the branch breakers Bmn, an image for branch power monitoring that is displayed in the terminal device becomes an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2, and therefore, it is possible to recognize at a glance that each branch electric power amount indicated is a power consumption amount of which electric equipment, or a power consumption amount of which room (from paragraph [0063]), and wherein

it is possible to unify systems if this power monitoring system is incorporated in a household equipment monitoring control system that performs control and monitoring of household equipment such as security equipment via a home network and the Internet (from paragraph [0078])."

(3) Comparison with Cited invention

A The Amended Invention and Cited invention will be compared.

(A) For the reason that "a mobile terminal device PT that is composed of a cellular phone handset and the like having a Web browser function and is connectable to the Internet" in Cited invention is one by which "control and monitoring of in-home electric equipment is performed from a place away from home," it corresponds to "the external device (120)" of the Amended Invention.

(B) "The integrated control board 1" in Cited invention "includes an energy management unit 2, and the integration device TM," "the energy management unit 2 detects an electric power amount supplied through each of the branch breakers Bmn for each of the branch breakers Bmn," and "the integration device TM" "is connected to a cellular phone handset MP or other terminal devices through the Internet, and controls data sending and receiving in the network."

Therefore, "the integrated control board 1" in Cited invention, performs detection of an "electric power amount" and performs "data sending and receiving" with "a cellular phone handset MP or other terminal devices through the Internet," and, therefore, it can be said that it corresponds to "a power meter (105) in communication with an external device (120)" of the Amended Invention.

(C) In Cited invention, "a message of a power monitoring request is transmitted to the energy management unit 2" of "the integrated control board 1" from "a terminal device

such as the portable terminal PT," and, by this, "an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2" is displayed in "the terminal device" as "an image for power monitoring," and this "power monitoring image" is an image that is provided (delivered) to a terminal device as a "web content."

As described in paragraph [0023] of the description of the present application (the translation dated Feb. 27, 2012) as "one or more graphical user interfaces such as a web page," in paragraph [0026] as "a graphical user interface (a web page and the like, for example)," and in paragraph [0040] as "one or more graphical user interfaces (a web page, for example)," this "web content" corresponds to the "graphical user interface" of the Amended Invention.

Therefore, it can be said that the matter that, in Cited invention, "a terminal device such as the portable terminal PT" "transmits a message of a power monitoring request" to "the energy management unit 2" of "the integrated control board 1"; that is, "the energy management unit 2" of "the integrated control board 1" is "requested" to perform provision (delivery) of a "web content" made up of "an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2" corresponds to "receiving (210), by a power meter (105), a request for a graphical user interface associated with at least one of (i) an operation of the power meter (105) or (ii) provision of electrical power to one or more loads" of the Amended Invention.

(D) "The control unit 2c" in Cited invention is included in "the energy management unit 2" of "the integrated control board 1," and "the control unit 2c stores data of the branch breakers Bmn that perform detection of an electric power amount (such as the name of a branch breaker: branch 1, branch 2, ...and the like) in advance, and creates web content (web page) as image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power)

and, in response to a request from a terminal device, provides (delivers) the relevant web content to the terminal device."

Therefore, in light of the above-mentioned "(C)," it can be said that the matter that "the control unit 2c" of "the integrated control board 1" in Cited invention "provides (delivers) to the terminal device" "web content (web page) as image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power)" "in response to a request from a terminal device" and "generating (215), by the power meter (105) based at least in part on the received request, information associated with the graphical user interface, and communicating (220), by the power meter (105) to the external device (120), the generated information associated with the graphical user interface" of the Amended Invention are common in a point that "communicating (220), by the power meter (105), based at least in part on the received request, information generated associated with the graphical user interface to the external device (120)."

(E) "The control unit 2c" in Cited invention is included in "the energy management unit 2" of "the integrated control board 1," and "the control unit 2c" makes "the names of the electric equipment Xmn or the rooms Rn corresponding to the branch breakers Bmn" be "stored in a manner making them correspond to the branch breakers Bmn, and subsequently, when the control unit 2c generates image data for monitoring branch power, the image data are generated with reference to an equipment name or a room name corresponding to each of the branch breakers Bmn, and an image for branch power monitoring that is displayed in the terminal device becomes an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2." Then, "a plurality of pieces of electric equipment Xmn (m=1, 2,..., n=1, 2,...) that are installed in a home" are "connected to the integrated control board 1 via an information transmission path Lj (LAN cable), and for which the integrated control board 1 performs electric power supply, control, and monitoring."

Therefore, this means that "the control unit 2c" of "the integrated control board 1" in Cited invention "detects" "a branch electric power amount that is made to correspond to an equipment name or a room name" regarding "a plurality of pieces of electric equipment Xmn (m=1, 2,..., n=1, 2,...)" "connected to the integrated control board 1 via an information transmission path Lj (LAN cable)," and, therefore, it can be said that the matter that "the control unit 2c" of "the integrated control board 1" in Cited invention performs such detection corresponds to "collecting (205), by the power meter (105), information associated with (i) the operation of the power meter (105) and (ii) one or more devices connected to the power meter (105) via a communication network" of the Amended Invention.

(F) In light of the above-mentioned "(C)," it can be said that the matter that "in the terminal device such as the portable terminal PT that has received the image data, the relevant image data are displayed on a monitoring screen of each terminal device" in Cited invention; that is, that "web content" is displayed, corresponds to "indicating information associated with the graphical user interface to a user using the one or more devices" of the Amended Invention.

(G) In light of the above-mentioned "(C)," it can be said that "the energy management unit 2" of "the integrated control board 1" "detects an electric power amount supplied through each of the branch breakers Bmn for each of the branch breakers Bmn," the control unit 2c included in "the energy management unit 2" makes "the names of the electric equipment Xmn or the rooms Rn corresponding to the branch breakers Bmn" be "stored in a manner making them correspond to the branch breakers Bmn," "the image data are generated with reference to an equipment name or a room name corresponding to each of the branch breakers Bmn," and "an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2 is generated" corresponds to "the information associated with the graphical

user interface is generated using at least a part of the collected information" of the Amended Invention.

(H) In light of the above-mentioned "(E)," it can be said that the matter in Cited invention that "the energy management unit 2" of "the integrated control board 1" "detects an electric power amount supplied through each of the branch breakers Bmn for each of the branch breakers Bmn," that the control unit 2c included in "the energy management unit 2" makes "the names of the electric equipment Xmn or the rooms Rn corresponding to the branch breakers Bmn" be "stored in a manner making them correspond to the branch breakers Bmn," and obtains "a branch electric power amount that is made to correspond to an equipment name or a room name" corresponds to "collecting" "(ix) information associated with provision of power to one or more external loads" in "collecting (205) information" in the Amended Invention, and, therefore, Cited invention and the Amended Invention are identical in a point that "the collecting (205) information includes collecting at least one of (i) an age of the power meter (105), (ii) identification information for the power meter (105), (iii) information associated with one or more environmental conditions, (iv) status information for one or more buttons associated with the power meter (105), (v) phase loading information associated with the power meter (105), (vi) status information for one or more load control relays, (vii) information associated with an operation of a utility meter (150) in communication with the power meter (105), (viii) information associated with an electrical load profile, and (ix) information associated with provision of power to one or more external loads."

(I) Although Cited invention is supposed to be the invention of a "system," and the Amended Invention be the invention of a "method," each of the matters specifying the Invention of Cited invention can be expressed also as a "step" as described above, respectively, and, therefore, it is recognized that Cited invention can be grasped as an

invention of a "method" including each of such steps.

B From the above, the corresponding features and the different features between the Amended Invention and Cited invention are as follows.

(Corresponding features)

A method (100), comprising:

receiving (210), by a power meter (105) in communication with an external device (120), a request for a graphical user interface associated with at least one of (i) an operation of the power meter (105) and (ii) provision of electrical power to one or more loads;

communicating (220), by the power meter (105), based at least in part on the received request, information generated associated with the graphical user interface to the external device (120);

collecting (205), by the power meter (105), information associated with (i) the operation of the power meter (105) or (ii) one or more devices connected to the power meter (105) via a communication network; and

indicating information associated with the graphical user interface to a user using the one or more devices, wherein

the information associated with the graphical user interface is generated using at least a part of the collected information, and wherein

the collecting (205) information includes collecting at least one of (i) an age of the power meter (105), (ii) identification information for the power meter (105), (iii) information associated with one or more environmental conditions, (iv) status information for one or more buttons associated with the power meter (105), (v) phase loading information associated with the power meter (105), (vi) status information for one or more load control relays, (vii) information associated with an operation of a

utility meter (150) in communication with the power meter (105), (viii) information associated with an electrical load profile, and (ix) information associated with provision of power to one or more external loads.

(The different feature 1)

In the Amended Invention, the power meter (105) generates information associated with the graphical user interface "based at least in part on the received request," whereas, in Cited invention, although "the control unit 2c" of "the integrated control board 1" "creates a web content (web page) as image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power)," and the "image for branch power monitoring" is "an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2," it is not clear whether the web content (web page) is generated based at least in part on the request from a terminal device.

(The different feature 2)

A point that, in the Amended Invention, "the one or more devices include a utility meter (150) including a gas meter and/or a water meter," whereas, in Cited invention, although "a plurality of pieces of electric equipment Xmn" are shown, a utility meter including a gas meter and/or a water meter is not indicated.

(4) Judgment

Hereinafter, the different features will be discussed below.

A Regarding the different feature 1

It is a well-known matter that a web server generates web content based at least in part on a request received from a terminal device.

Then, "the control unit 2c" of "the integrated control board 1" in Cited invention "has a function (web server function) to, in response to a request from a terminal device, provide (deliver) the relevant web content to the terminal device," and, therefore, it could have been achieved by a person skilled in the art with ease to apply the above-mentioned well-known matter to Cited invention, and, in Cited invention, make "the control unit 2c" of "the integrated control board 1" generate, based at least in part on a request received from a terminal device, a web content that is "image data for indicating a main electric power amount and a branch electric power amount (for example, image data for monitoring branch electric power)" and is "an image that expresses a branch electric power amount that is made to correspond to an equipment name or a room name in bar graph G2," thereby making it be of the constitution concerning the above-mentioned Different Feature 1 of the Amended Invention.

B Regarding the different feature 2

For example, as described in paragraph [0025] of Japanese Unexamined Patent Application Publication No. 2004-12148 that "The present embodiment relates to a consumption amount recording device 1 as an energy data management device to store a consumption amount of energy of electricity, gas, tap water, and the like in a residential house, and make an energy consumption situation be displayed on a display device of a terminal computer 31 within a household as a display screen.", it is a well-known matter that it is desirable to inform not only an electric power amount but also, regarding consumption amounts of energy such as gas, tap water, and the like, and consumption situation of these to a user in order to perform energy saving in a home comprehensively.

Then, since Cited invention is an invention aimed at saving energy in a home (refer to paragraphs [0010] and [0060] of Cited Document 1), it could have been

achieved by a person skilled in the art with ease to, in Cited invention, on the occasion when "this power monitoring system is incorporated in a household equipment monitoring control system that performs control and monitoring of household equipment" "to unify systems," make it be of the constitution of the Amended Invention concerning the above-mentioned Different Feature 2 in order to perform energy saving comprehensively in a home, by, not only detecting electric power amounts of "a plurality of pieces of electric equipment Xmn," but also, connecting a tap water meter and a gas meter to the integrated control board 1 via "the information transmission path Lj (LAN cable)" to allow "the energy management unit 2" of "the integrated control board 1" to detect consumption amounts also from these meters.

C Then, even if these different features are comprehensively taken into consideration, an effect exerted by the Amended Invention is nothing but an effect within a range predicted from the effect exerted by Cited invention and the well-known matter, and thus it cannot be regarded as a particularly distinguishing effect.

D Accordingly, the Amended Invention could have been invented with ease by a person skilled in the art based on Cited invention and the well-known matter, and thus the appellant should not be granted a patent for this independently at the time of patent application under the provisions of Article 29(2) of the Patent Act.

(5) Closing regarding propriety of the Amended Invention

As above, the Amendment violates the provisions of Article 126(7) of the Patent Act as applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the same Act, and thus it should be dismissed under the provisions of Article 53(1) of the same Act which is applied mutatis mutandis pursuant to the provisions of Article 159(1) of the same Act.

No. 3 Regarding the invention

1 The Invention

As the Amendment was dismissed as above, the inventions according to claims 1 to 9 of the present application are specified by the matters described in claims 1 to 9 of the scope of claims amended by the amendment dated Jan. 15, 2016, and the relevant invention according to claim 1 (hereinafter, referred to as "the Invention") is as described in the above-mentioned No. 2 [Reason] 1 "(2) Claims before the Amendment."

2 Cited Document

The above-mentioned Cited Document 1 cited in the reasons for refusal stated in the examiner's decision and the described matters of it are as have been described in the above No. 2 [Reason] 2 (2).

3. Comparison / Judgment

The Invention is an invention made by, in the Amended Invention,

A cancelling the limitation regarding "one or more devices" that these are "connected via a communication network" to the power meter (105), and the limitation that "the one or more devices include a utility meter (150) including a gas meter and/or a water meter," and in conjunction with this,

B regarding "collecting (205) information," cancelling the limitation of "collecting (205), by the power meter (105), information associated with (i) the operation of the power meter (105) and (ii) one or more devices connected to the power meter (105) via a communication network" to "collecting (205) information associated with (i) the

operation of the power meter (105) or (ii) at least one of one or more devices connected to the power meter (105)."

From this, since the Amended Invention that includes the whole matters specifying the invention of the Invention and that corresponds to an invention made by further adding other matters could have been invented by a person skilled in the art with ease based on Cited invention and the well-known matter as has been described in No. 2 [Reason] 2 (3), (4), the Invention also could have been invented by a person skilled in the art with ease based on Cited invention and the well-known matter for the same reason.

4 Closing

As above, the appellant should not be granted a patent for the Invention under the provisions of Article 29(2) of the Patent Act, and, therefore, without examining the inventions according to other claims, the present application should be rejected.

Therefore, the appeal decision shall be made as described in the conclusion.

June 16, 2017

Chief administrative judge: NAKATSUKA, Naoki
Administrative judge: SHIMIZU, Minoru
Administrative judge: SEKINE, Hiroyuki