

Appeal decision

Appeal No. 2018-7609

Osaka, Japan

Appellant PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CORPORATION

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The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2016-213981, entitled "Washing machine" (the application published on January 26, 2017, Japanese Unexamined Patent Application Publication No. 2017-18745) has resulted in the following appeal decision.

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

This application was filed on November 1, 2016 as a divisional application of Japanese Patent Application No. 2012-155308 filed on July 11, 2012. Reasons for refusal were notified as of August 9, 2017. In response to that, a written opinion was submitted on September 28, 2017, and an examiner's decision of refusal was issued on February 27, 2018. An appeal against the examiner's decision of refusal was requested on June 4, 2018.

No. 2 The Invention

The inventions according to Claims 1-4 of the application are recognized as being specified by the matters described in Claims 1-4 of the scope of claims originally attached to the divisional application filed on November 1, 2016. The invention according to Claim 1 (hereinafter referred to as "the Invention") is as follows.

"A washing machine including a touch panel display part for detecting a change in capacitance generated when touched by a finger, and a pressing operation button part which is operated by being pressed by a finger, wherein the touch panel display part is inclined, and the pressing operation button part is arranged separately and independently from the touch panel display part."

No. 3 Reasons for refusal in the examiner's decision

The reasons for refusal in the examiner's decision are as follows. Since the inventions according to Claims 1-3 of the application could be easily invented by a person ordinarily skilled in the art of the invention (hereinafter referred to as "a person skilled in the art") before the filing of the patent application, based on the invention described in Cited Document 1, the invention described in Cited Document 2, which were distributed or made publicly available through an electric telecommunication line

in Japan or a foreign country before the filing of the patent application, and well-known arts, the appellant should not be granted a patent for the inventions under the provisions of Article 29(2) of the Patent Act.

Since the invention according to Claim 4 of the application could be easily invented by a person skilled in the art based on the invention described in Cited Document 1, the invention described in Cited Document 2, the invention described in Cited Document 3, which were distributed or made publicly available through an electric telecommunication line in Japan or a foreign country before the filing of the patent application, and well-known arts, the appellant should not be granted a patent for the invention under the provisions of Article 29(2) of the Patent Act.

Cited Document 1. U.S. Patent Application Publication No. 2004/0163424 Specification

Cited Document 2. International Publication No. 2010/135478

Cited Document 3. Japanese Unexamined Patent Application Publication No. H10-127977

Cited Document 4. Japanese Unexamined Patent Application Publication No. 2009-56221 (Document showing well-known arts)

No. 4 Matters described in the Cited Documents

1 Description of Cited Document 1

In Cited Document 1 cited for the reasons for refusal in the examiner's decision, the following matters are described together with drawings (the underlines were added by the body).

(A) "[0041] Referring to FIG. 3, the present invention includes a drum type washing machine 200, a first control panel 400 on the drum type washing machine 200, a dryer 300, and a second control panel 400 on the dryer 300."

(B) "[0042] The first control panel 400 includes a key part 410 for application of command for controlling the drum type washing machine or the dryer 300, a display part 420 for displaying an image in accordance with the command to the key part 410, a first case 430 for fastening the key part 410 and the display part 420 thereto, and a first controlling part (not shown) for controlling operation of a relevant appliance according to the command applied through the key part 410 or the display part 420."

(C) "[0050] Referring to FIG. 6, the control panels in accordance with a first preferred embodiment of the present invention include a first control panel 400 on a drum type washing machine 200 or a dryer 300 having a key part 410 for applying a command a user desires, and a display part 420 for displaying user's command given through the key part 410, or by user's touch thereon, ... "

(D) "[0051] The key part 410 or 510 includes a power key 411 or 511 for applying power to the drum type washing machine 200 or the dryer 300, a start/stop key 412 or 512 for applying an operation start command or an operation stop command to the drum type washing machine or the dryer, a back key 413 or 513 for displaying an image prior to an image displayed on the display part 420 or 520 presently, a home key 414 or 514 for initializing all menu, and my favorite key 415 or 515 for selecting a course the user

desires."

(E) "[0052] The display part 420 or 520 includes a touch panel 420 or 520 for displaying the command applied through the key part 410 or 510, and a menu for selecting a control operation proper to the drum type washing machine 200 or the dryer 300, and selecting the control operation for carrying out the operation."

(F) "[0054] If the user presses the my favorite key 415, for example, of the drum type washing machine 200, a menu is displayed on the touch panel, the display part 420, so that the user, by mere touch thereon, selects a washing condition as desired by setting a desired course, or by retrieving, and displaying a my favorite course stored therein already, and processes a washing cycle more conveniently with reference to the displayed menu."

2. Cited invention

According to the descriptions in the above 1 (E) and (F), it can be said that the display part 420 including the touch panel 420 detects a touch of a user for selecting a control operation to be executed by the user.

According to the contents shown by FIG. 3 and FIG. 4 of Cited Document 1, the first control panel 400 of the drum type washing machine 200 is raised with an angle with respect to a horizontal top face of the drum type washing machine 200, and it can be said that the display part 420 arranged on the first control panel 400 is inclined.

According to the description in the above 1 (B), the first control panel 400 includes the key part 410 for applying a command to control the drum type washing machine, and the display part 420 for displaying an image in accordance with the command of the key part 410, and considering together with the contents shown by FIG. 3 and FIG. 4 of Cited Document 1, it can be said that the key part 410 and the display part 420 are arranged in different locations.

Therefore, in light of the matters described in Cited Document 1 (1 (A) to (F)) and the contents shown by the figures, Cited Document 1 is recognized as describing the following invention (hereinafter referred to as "Cited Invention").

"A drum type washing machine 200 comprising a display part 420 including a touch panel 420 for detecting a touch of a user, and a key part 410 for applying a command the user desires, wherein the display part 420 including the touch panel 420 is inclined, and the key part 410 and the display part 420 including the touch panel 420 are arranged in different locations"

3 Description of Cited Document 2

In Cited Document 2 cited for the reasons for refusal in the examiner's decision, the following matters are described together with drawings (the underlines were added by the body).

(G) "[00128] Figure 6c illustrates a combined washer and dryer system for an individual appliance employing a small sensor /projector such as disclosed in my copending applications. Projector and sensor combinations of this type for example can be based

on the Microvision brand "pico projector", which is slated for cell phone application. The projector 685 is controlled by computer 690 which receives inputs from the knob, switch, and touch screen commands of the system. Video images are projected obliquely onto the rear of the screen and control surface 675 on which 3M TRAF turning film has been placed to turn the image toward the user. The projected image is over scanned on the screen such that all the screen surface desired may be illuminated."

(H) "[00129] Two states are shown, each activated by electrical power and control button 671 or 672 as desired, to operate a washer or dryer portion of a machine, or pair of machines. Main control and selection knob 676 which may optionally have a stylish and informative screen in its center as disclosed in my pending 11/045,131 application, and other applications. The knob may be in the form of a ring of a radial thickness t, and if desired (and as disclosed in copending applications) may be designed in such a way as to be able to be pressed in or pulled out, to start or stop a cycle, just as many conventional knobs are today. The knob indicator may be a physical pointer, or it may, as in 682, be simply projected on the screen surface, or alternatively it may be projected on the knob face or other knob surface. Two other knobs are provided in this one' example 678 and 679. More knobs or switches or sliders or other controls may be provided as shown in copending applications. These controls may be optically sensed, but they may alternatively or in addition be sensed using electronic means known in the art. One of several desirable versions of the latter is a capacitive touch switch."

No. 5 Comparison

The Invention and the Cited Invention are compared below.

"A display part 420 including a touch panel 420 for detecting a touch of a user" in the Cited Invention and "a touch panel display part for detecting a change in capacitance generated when touched by a finger" in the Invention are identical with each other in the point of being "a touch panel display part for detecting a touch of a finger". Thus, the matter in the Cited Invention, "the display part 420 including the touch panel 420 is inclined", corresponds to the matter in the Invention, "the touch panel display part is inclined".

Regarding the "key part 410 for applying a command the user desires" in the Cited Invention, according to the above 1 (F), the favorite key 415 constituting the key part 410 is pressed, and it is obvious that the key part 410 is operated by being pressed by a finger in light of the contents shown by FIG. 3, FIG. 4, and FIG. 6 of Cited Document 1. It is natural to consider that the power key 411, the start/stop key 412, the back key 413, and the home key 414 are also operated by being pressed by a finger as well. Thus, "a key part 410 for applying a command the user desire" in the Cited Invention corresponds to "a pressing operation button part which is operated by being pressed by a finger" in the Invention.

The "key part 410" in the Cited Invention corresponds to the "pressing operation button part" in the Invention, and the "display part 420 including a touch panel 420" in the Cited Invention corresponds to the "touch panel display part" in the Invention, therefore, the matter in the Cited Invention, "the key part 410 and the display part 420 including the touch panel 420 are arranged in different locations", corresponds to the matter in the Invention, "the pressing operation button part is arranged separately and independently from the touch panel display part".

In addition, "a drum type washing machine 200" in the Cited Invention corresponds to the "a washing machine" in the Invention.

Therefore, the Invention and the Cited Invention are identical with each other in the following points:

"A washing machine including a touch panel display part for detecting a touch of a finger, and a pressing operation button part which is operated by being pressed by a finger, wherein the touch panel display part is inclined, and the pressing operation button part is arranged separately and independently from the touch panel display part", and they are different from each other in the following points.

[Different Feature]

A touch panel display part in the Invention is specified as "detecting a change in capacitance generated when touched by a finger", while it is unclear whether a touch panel display part in the Cited Invention detects a change in capacitance even though detecting a touch of a finger.

No. 6 Judgment

1 Regarding the Different Feature

The Different Feature is examined below.

According to No. 4 3 (G) and (H) and the contents shown by Figure 6c of Cited Document 2, Cited Document 2 describes that, in the washer, the knobs 678 and 679 are arranged on the screen and control surface 675, independently from the electrical power and control buttons 671 and 672, to project an image on surfaces of the knobs 678 and 679, that the controls on the knobs 678 and 679 may be sensed optically or using electronic means, and that especially, a capacitive touch switch is preferably used for sensing as electronic means.

The Cited Invention and the matters described in Cited Document 2 belong the same technical field which relates to an operation display part of a washing machine. The display part 420 including the touch panel 420 in the Cited Invention and the screen and control surface 675 with the knobs 678 and 679 arranged thereon described in Cited Document 2, which are arranged separately and independently from a power switch or the like and configured to have a function of receiving user operation by sensing a touch of a finger of a user and a function of displaying information for supporting user operation, have the same effect/function.

Although the touch panel 420 in the Cited Invention does not clearly indicate how to sense a touch of a finger of a user, it can be said that a person coming into contact with Cited Document 1 may employ a desired method out of various methods for sensing a touch of a finger, in embodying the touch panel 420 of the Cited Invention. At that time, a person skilled in the art could easily conceive of employing a capacitive device which is preferred for sensing operation in Cited Document 2, based on the matters described in Cited Document 2 comprising the screen and control surface 675 belonging to the same technical field and having the same effect/function as the display part 420 including the touch panel 420, to implement the matters specifying the invention relating to the different feature of the Invention.

The "display part 420 including the touch panel 420" is inclined. As described in, for example, Cited Document 4 (with reference to, especially, the description, "the

touch-type switch 32, which is a capacitive one, is configured to detect operation by detecting variation of capacitance on surfaces of the operation parts 44a-44g." ([0022]), and the contents shown by Figs.1 to 3) cited in the reasons for refusal in the examiner's decision, it had been well-known before the filing of the patent application to arrange input means, which senses a touch of a finger by variation of capacitance, on an inclined portion. This fact indicates that a person skilled in the art can easily employ a capacitive device based on the matters described in Cited Document 2 in embodying the touch panel 420 in the Cited Invention, as described above, even if the "display part 420 including the touch panel 420" in the Cited Invention is inclined.

2 Appellant's allegation

The appellant alleges in the written appeal as follows: "The Invention is, contrary to the common technical knowledge, to mount a touch panel with an inclination in order to prevent false detection even when liquid detergent, which may cause false detection, adheres to the touch panel, in developing a washing machine with a capacitive touch panel mounted thereon. In the configuration of the Invention, even when liquid detergent drops on the touch panel, the liquid detergent trickles down due to the inclination of the touch panel, thereby preventing false detection. ... (Omitted) ... The Cited documents do not disclose a configuration of arranging a capacitive touch panel on an inclined surface as a configuration for preventing false detection when fouling adheres to a capacitive touch panel. It cannot be derived from combinations of the Cited documents."

However, in the specification, scope of claims, and drawings originally attached to the original application (Japanese Patent Application No. 2012-155308), FIG. 1, FIG. 2, and FIG. 6 indicate arranging the touch panel display part 38 for detecting variation of capacitance with an inclination, but the specification and scope of claims do not include description about the inclination.

In the specification, scope of claims, and drawings of this application, which is the divisional application of the original application, FIG. 1, FIG. 2, and FIG. 6 indicate the inclination, and Claim 1 includes the description "the touch panel display part is inclined". Even though the same description as Claim 1 is included in [0010], there is no description about the effect, which is alleged in the written appeal by the appellant, that liquid detergent trickles down due to inclination of a touch panel when the liquid detergent drops on the touch panel, or a solution for the problem of preventing false detection when fouling adheres to a capacitive touch panel by arranging the capacitive touch panel on an inclined surface.

Related to that, in the specification of this application, a relation between a capacitive touch panel and liquid detergent is described as follows.

"[Effect of the invention]

[0011]

The washing machine of the Invention can reliably prevent operation error when fouling, such as liquid detergent, adheres in a pressing operation button part."

"[0054]

As described below, since input operation in the touch panel display part 38 is performed by detecting variation of capacitance caused by a fingertip of a user, it is difficult to completely prevent operation error. If water or detergent adheres onto a

power-on button (not shown), which is arranged in the touch panel display part 38, on a screen, the water or detergent is falsely detected as user operation, and a malfunction may occur to turn on the washing machine."

"[0094]

According to FIG. 11 (a) to (c), sensitivity H_a of water, which is lower in conductivity than in sensitivity, is equal to or lower than a threshold S . Sensitivity H_b of liquid detergent, which is high in conductivity, may be equal to or higher than the threshold S . It is found that a malfunction is likely to occur due to false detection."

"[0098]

However, as described above, since the start button 54, the power-on button 52, the power-off button 53, and the return button 55 are separated independently from the touch panel display part 38, functions for start, power-on, power-off, and returning to a previous screen are not falsely detected, and operability and safety can be ensured."

"[0101]

Even if water or detergent adheres to the touch panel display part, safety can be ensured by arranging operation buttons closely related to safety, such as power-on, power-off, and start buttons, separately and independently. The contents operated in the touch panel display part are limited to the contents which do not lead to an unsafe state, such as time settings in course settings."

From the above descriptions, we recognize that operation buttons closely related to safety are arranged as pressing operation buttons which are independently separated from the touch panel display part, thereby ensuring safety, on the assumption of the problem that water or liquid detergent adhering to a screen of the touch panel display part causes a malfunction when the touch panel display part for detecting variation of capacitance is used. On the other hand, even though FIG. 1, FIG. 2, and FIG. 6 indicate arranging the touch panel display part 38 for detecting variation of capacitance with an inclination, we cannot find an effect that liquid detergent trickles down due to the inclination or a matter of preventing false detection of the capacitive touch panel, from the above descriptions in the specification. Even if the touch panel display part 38 for detecting variation of capacitance is arranged as shown with an inclination, it is recognized that the operations buttons closely related to safety are arranged separately and independently from the touch panel display part, because false detection of the capacitive touch panel cannot be completely prevented.

In light of the above, the appellant's allegation in the written appeal is not based on the matters described in the specification, scope of claims, and drawings of the application, or not based on the matters described in the specification, scope of claims, and drawings originally attached to the original application. Therefore, the appellant's allegation cannot be accepted, and an inventive step of the Invention cannot be affirmed.

Even if, an effect that liquid detergent which has dropped on the touch panel trickles down due to inclination of the touch panel, or the solution for the problem of preventing false detection when fouling adheres to a capacitive touch panel by arranging the capacitive touch panel on an inclined surface, which are alleged in the written appeal by the appellant, is not disclosed in the specification, scope of claims, or

drawings, as long as the above matters are obvious to a person skilled in the art, because the display part 420 including the touch panel 420 in the Cited invention is also inclined, it supports that a person skilled in the art can easily employ a capacitive device, based on the matters described in the Cited document 2, as the touch panel 420 of the Cited Invention.

3 Effect of the Invention

The function and effect of the Invention fall within a range which could be predicted by a person skilled in the art from the Cited Invention, the matters described in Cited Document 2, and well-known matters, and cannot be said to be remarkable.

No. 7 Closing

Therefore, the Invention could have been easily invented by a person skilled in the art based on the Cited Invention, the matters described in Cited Document 2, and well-known matters. Thus, the appellant should not be granted a patent in accordance with the provisions of Article 29(2) of the Patent Act.

The present application containing the unpatentable invention should be rejected without examining inventions relating to other claims.

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

February 18, 2019

Chief administrative judge:	FUJII, Noboru
Administrative judge:	KAKIZAKI, Hiraki
Administrative judge:	NAGAMA, Nozomi