

Appeal decision

Appeal No. 2015- 13984

Korea

Appellant SAMSUNG DISPLAY CORPORATION

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The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2010-283103, entitled "ORGANIC LIGHT EMITTING DISPLAY AND METHOD OF DRIVING THE SAME" (the application published on May 17, 2012, Japanese Unexamined Patent Application Publication No. 2012-93688) has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The application was filed on December 20, 2010 (priority claim under the Paris Convention: October 28, 2010, Korea). In response to the notice of reasons for refusal dated July 30, 2014, an amendment was made on October 20, 2014. The examiner's decision of refusal was issued on March 17, 2015, against which an appeal against the examiner's decision of refusal was requested and an amendment was made at the same time on July 24, 2015.

No. 2 Decision to dismiss the amendment dated July 24, 2015

[Conclusion of Decision to Dismiss Amendment]

The amendment (hereinafter, referred to as "the Amendment") dated July 24,

2015 shall be dismissed.

[Reason]

1 The amendment

The Amendment was made on the scope of claims as follows. The description before the Amendment:

"[Claim 4]

A driving method of an organic light emitting display comprising steps of:

charging first sub pixels set to be in a non-emission state with a voltage corresponding to a right-data signal for a right glass of shutter glasses during a first frame period; and

charging a second sub pixels, arranged alternately with the first sub pixels, set to be in a non-emission state, with a voltage corresponding to a left-data signal for a left glass of shutter glasses during a second frame period,

wherein the second sub-pixels are set to be in an emission state during the first frame period, and the first sub-pixels are set to be in an emission state during the second frame period."

is amended to include a description (The underline represents an amended part.):

"[Claim 4]

A driving method of an organic light emitting display comprising steps of:

charging first sub-pixels set to be in a non-emission state with a voltage corresponding to a right-data signal for a right glass of shutter glasses during a first frame period corresponding to a first half period of a display period of displaying one 3D image;

charging second sub-pixels, arranged alternatively with the first sub-pixels, set to be in a non-emission state with a voltage corresponding to a left-data signal for a left glass of shutter glasses during a second frame period corresponding to a second half period of the display period,

wherein the second sub-pixels are set to be in an emission state during the first frame period, and the first sub-pixels are set to be in an emission state during the second frame period."

The Amendment is examined.

The Amendment limits "the first frame period" of Claim 1 before the Amendment to be the first frame period "corresponding to a first half period of a

display period of displaying one 3D image", and limits "the second frame period" to be the second frame period "corresponding to a second half of the display period".

Therefore, since the Amendment limits the matters required to specify the invention described in Claim 4 before the Amendment, the Amendment corresponds to an amendment aiming at restriction of the scope of claims that falls under the category of Article 17-2(5) of the Patent Act.

Therefore, it will be examined below whether the invention (hereinafter referred to as "the Amended Invention") relating to Claim 4 specified by the matters described in the scope of claims after the Amendment should have been granted a patent independently at the time of patent application (whether requirements stipulated in Article 126(7) of the Patent Act which is applied *mutatis mutandis* pursuant to the provisions of Article 17-2(6) of the Patent Act are met).

2 Cited Document and Described Matters of the Same

(1) Japanese Unexamined Patent Application Publication No. 2008-158477 (published on July 10, 2008, hereinafter referred to as "Cited Document 1"), which is a publication distributed before the application to be a basis of priority claim of the Application, which is cited in the reasons for refusal stated in the examiner's decision, describes the following matters with drawings (Underlines are added by the body.)

"[0001]

The present invention relates to an organic light emitting display and a driving method thereof and, more particularly, to an organic light emitting display and a driving method thereof that ensure an operation margin of a driving circuit when driving a large-size panel by applying an interlace system, prevent a voltage drop (IR-drop) of a first power source line VDD, and, simultaneously, minimize degradation of the organic light emitting diode OLED in a pixel circuit of the organic light emitting display by dividing a data write period from a light emission period in driving the panel. (omitted)"

"[0162]

Referring to FIG. 13, a block diagram depicting a basic structure of an organic light emitting display in accordance with the present invention driven in an interlace system

is shown.

[0163]

As depicted in FIG. 13, an organic light emitting display 100 may include a scan signal driver 110, a data signal driver 120, an emission control signal driver 130, an organic light emitting display panel 140 (hereinafter referred to as the panel 140), a first power supply unit 150, a second power supply unit 160, and an initial power supply unit 170.

[0164]

The scan signal driver 110 may supply scan signals to the panel 140 through a plurality of scan signal lines S[1] to S[N]. As depicted in FIG. 13, the scan signal lines may be configured horizontally in such a manner that a first scan signal line and a third scan signal line are electrically coupled to pixels in a first line, and a second scan signal line and a fourth scan signal line are electrically coupled to pixels in a second line. That is, the scan signal lines may be electrically coupled to pixels on odd and even lines in sequence.

[0165]

The data signal driver 120 may supply data signals to the panel through a plurality of data signal lines D[1] to D[M].

[0166]

The emission control signal driver 130 may supply, in sequence, emission control signals and emission reverse control signals to the panel 140 through a plurality of emission control signal lines EM[1] to EM[N] and a plurality of emission reverse control signal lines EMB[1] to EMB[N].

[0167]

Moreover, the panel 140 may include a plurality of scan signal lines S[1] to S[N], a plurality of emission control signal lines EM[1] to EM[N] and a plurality of emission reverse control signals EMB[1] to EMB[N], arranged in the vertical direction, a plurality of data signal lines D[1] to D[M] arranged in the horizontal direction, and a pixel circuits 142 defined by the scan signal lines S[1] to S[N], the emission control signal lines EM[1] to EM[N], the emission reverse control signal lines EMB[1] to EMB[N], and the data signal lines D[1] to D[M].

[0168]

Here, the pixel circuit 142 may be formed in a pixel area defined by the scan line and the data line. As described above in detail, the scan signals may be supplied from the scan signal driver 110 to the scan signal lines S[1] to S[N], the data signals may be supplied from the data signal driver 120 to the data signal lines D[1] to D[M], and the

emission control signals and the emission reverse control signals may be supplied from the emission control signal driver 130 to the emission control signal lines EM[1] to EM[N] and the emission reverse control signal lines EMB[1] to EMB[N]. Moreover, the first power supply unit 150, the second power supply unit 160, and the initial power supply unit 170 supply a first power voltage, a second power voltage, and an initial power voltage to the pixel circuits 142 in the panel 140, respectively."

"[0172]

Referring to FIG. 14, a driving timing diagram, in which the pixel circuit depicted in FIG. 5 is driven in the interlace system, is depicted. As depicted in FIG. 14, the pixel circuit of the organic light emitting display in accordance with the present invention proceeds with a first frame, a second frame, a third frame, and a fourth frame in sequence, in which the driving timing diagram of the odd frames such as the first frame, the third frame, and the fifth frame may be the same and the driving timing diagram of the even frames such as the second frame, the fourth frame, and the sixth frame may be the same.

[0173]

In more detail, during the odd frame period, the pixels of the odd numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED. During such an odd frame period, the pixels on the even line emit light.

[0174]

Meanwhile, during the even frame period, the pixels of the odd numbered lines emits light and the pixels of the even numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED.

[0175]

Like this, while the pixels on the odd line in the panel emit light as the odd frame and the even frame are performed in sequence, the pixels of the even numbered lines performs the data write and applies a reverse bias voltage to the organic light emitting diode OLED. While the pixels on the even line in the panel emit light as the odd frame and the even frame are performed in sequence, the pixels of the odd numbered lines performs the data write and applies a reverse bias voltage to the organic light emitting diode OLED. That is, by driving the pixel circuits in such an interlaced

scanning method (an interlace system), it is possible to ensure an operation margin of a driving circuit when driving a large-size panel."

A It may be concluded that the Cited Document 1 describes "a method of driving the organic light emitting display that ensure an operation margin of a driving circuit by applying an interlace system" ([0001]).

B It may be concluded that the Cited Document 1 describes "an organic light emitting display 100 may include a scan signal driver 110, a data signal driver 120, an emission control signal driver 130, and an organic light emitting display panel 140 (hereinafter referred to as the panel 140)" ([0163]).

C The Cited Document 1 describes "the scan signal driver 110 may supply scan signals to the panel 140 through a plurality of scan signal lines S[1] to S[N]" ([0164]).

D The Cited Document 1 describes "the data signal driver 120 may supply data signals to the panel through a plurality of data signal lines D[1] to D[M]" ([0165]).

E The Cited Document 1 describes "the emission control signal driver 130 may supply in sequence emission control signals to the panel 140 through a plurality of emission control signal lines EM[1] to EM[N]" ([0166]). (Here, "the emission control signal EM[1]" described in paragraph [0166] is recognized as a misprint of "the emission control signal line EM[1]").)

F It may be concluded that, from a description of the Cited Document 1 "[0167] and the panel 140 may include ... pixel circuits 142.", the Cited Document 1 describes "the panel 140 includes pixel circuits 142".

G The Cited Document 1 describes "during the odd frame period, the pixels of the odd numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED, and during such an odd frame period, the pixels on the even line emit light, while, during the even frame period, the pixels of the odd numbered lines emits light and the pixels of the even numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse

bias voltage to the organic light emitting diode OLED" ([0173], [0174]).

Therefore, by summing up the matters described in the Cited Document 1 and A through G described above, the Cited Document 1 describes the following matters (hereinafter referred to as the Cited Invention).

" A method of driving the organic light emitting display that ensure an operation margin of a driving circuit by applying an interlace_system, wherein

an organic light emitting display 100 may include a scan signal driver 110, a data signal driver 120, an emission control signal driver 130, and an organic light emitting display panel 140 (hereinafter referred to as the panel 140),

the scan signal driver 110 may supply scan signals to the panel 140 through a plurality of scan signal lines S[1] to S[N],

the data signal driver 120 may supply data signals to the panel through a plurality of data signal lines D[1] to D[M],

the emission control signal driver 130 may supply, in sequence, emission control signals to the panel 140 through a plurality of emission control signal lines EM[1] to EM[N],

the panel 140 may include pixel circuits 142,

during the odd frame period, the pixels of the odd numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED, and during such an odd frame period, the pixels on the even line emit light, and

while, during the even numbered frame period, each of the pixels of the odd lines emits light and the pixels of the even numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED."

(2) Japanese Unexamined Patent Application Publication No. 2001-320734 (published on November 16, 2001, hereinafter referred to as "Cited Document 2"), which is a publication distributed before the application to be a basis of priority claim of the Application, which is cited in the reasons for refusal stated in the examiner's decision, describes the following matters with drawings (Underlines are added by the body.)

"[0001]

[Field of the Invention] The present invention relates to a stereoscopic picture display device that can photograph an image for a right eye and an image for a left eye, and can display the image stereoscopically through shutter glasses."

"[0043] The case where a display 55 of an interlace system is used is described. In the memory 56a of a VRAM 56 described above, horizontal scanning line data of cutoff image data for a right eye for each one line, for instance, cutoff image data for a right eye from which even numbered lines are thinned out, are recorded. In a memory 56b, horizontal scanning line data of cutoff image data for a left eye for each one line, for instance, cutoff image data for a left eye from which odd numbered lines are thinned out, are recorded. From the memory 56a, the cutoff image data for a right eye are output to the display 55 as image data for one field. From the memory 56b, the cutoff image data for a left eye are output as image data for the next one field. Therefore, on the display 55, as illustrated in FIG. 9 (A), an image in which even numbered lines are thinned out is displayed first, and then, an image in which odd numbered lines are thinned out is displayed."

Here, it may be concluded that "horizontal scanning line data of cutoff image data for a right eye for each one line, for instance, cutoff image data for a right eye from which even numbered lines are thinned out, are recorded" indicates that cutoff image data for a right eye in odd numbered lines of the cutoff image data for a right eye are recorded. Moreover, it may be concluded that "horizontal scanning line data of cutoff image data for a left eye for each one line, for instance, cutoff image data for a left eye from which odd numbered lines are thinned out, are recorded" indicates that even numbered lines of the cutoff image data for a left eye are recorded. Similarly, it may be concluded that "an image from which even numbered lines are thinned out" and "an image from which odd numbered lines are thinned out" are an image in odd numbered lines and an image in even numbered lines, respectively.

Therefore, from the description above and FIG. 9, it may be concluded that the following matters are described.

" A stereoscopic picture display device that can display an image stereoscopically through shutter glasses ([0001]) is configured so that,

in a case where a display 55 of an interlace system is used, cutoff image data for a right eye in odd numbered lines of the cutoff image data for a right eye are

recorded, even numbered lines of the cutoff image data for a left eye are recorded, the cutoff image data for a right eye are output to the display 55 as image data for one field, the cutoff image data for a left eye are output as image data for the next one field, on the display 55, an image in odd numbered lines is displayed first, and then, an image in even numbered lines is displayed ([0043])."

(3) Japanese Unexamined Patent Application Publication No. H10-105735 (published on April 24, 1998, hereinafter referred to as "Cited Document 3"), which is a publication distributed before the application to be a basis of priority claim of the Application, describes the following matters with drawings (Underlines are added by the body.)

"[Detailed Description of the Invention]

[0001]

[Field of the Invention] The present invention relates to an input device capable of stereoscopic viewing that displays an input element (operation component) image, and an image display system including the same."

"[0013]

[Mode for Carrying out the Invention] Hereinafter, a suitable embodiment of the present invention is described with reference to the attached drawings.

[0014] <First embodiment> FIG. 1 is a block diagram showing a composition of an image display system according to a first embodiment. As shown in FIG. 1, an observer 1 can observe a stereoscopic image by the image display system with a stereoscopic display device 3, and the observer can perform desired operation instruction from an input device constituted of a touch panel 2 and the stereoscopic display device 3. The touch panel 2 includes a transparent electrode, and the observer 1 can observe a display image by the stereoscopic display device 3 through the touch panel 2."

"[0027] A parallax image stored in frame memories L52 and R53 is synthesized in order to perform a stereoscopic display, and is stored in a synthesis frame memory 55. FIG. 7 is a view illustrating a synthesizing process of a parallax image in the first embodiment. In the embodiment, time division stereoscopic observation is enabled by using the liquid crystal shutter glasses system as stereoscopic display means. Therefore, an image for a right eye is stored in one of an odd numbered field and an

even numbered field of a synthesis frame memory and an image for a left eye is stored in the other field. In this example, an image for a left eye shall be stored in an odd numbered field, and an image for a right eye shall be stored in an even numbered field.

[0028] When it is confirmed that storing of a parallax image to the frame memory L52 and the frame memory R53 has been completed, the control part 4 reads data of the first one line of the first odd numbered field of the frame memory L52 to the temporary memory 54. And the data of the temporary memory 54 are stored in the first line of the synthesis frame memory 55. Next, the second (third line of frame memory L52) line of the odd numbered field of the frame memory L52 is read to the temporary memory 54, and this is stored in the second line of the odd numbered frame of the synthesis frame memory. Henceforth, the data of the odd numbered field of the frame memory L52 are similarly stored in the odd number field of the synthesis frame memory 55. When storing of the data of the odd number field of the frame memory L52 is completed, the data of the odd numbered field of the frame memory R53 are stored in the even numbered field of the synthesis frame memory 55 in a similar way. As a result, a synthetic image turns into a time division stereoscopic video in which the image for a left eye is stored in the odd numbered field and the image for a right eye is stored in the even numbered field."

"[0030] FIG. 9 is a block diagram illustrating the detailed composition of the time division stereoscopic display part 32 in the first embodiment. The stereoscopic display means of this embodiment is a time division stereoscopic display device using the liquid crystal shutter glasses in sync with the field display of the stereoscopic video. Reference numeral indicates a 33 is a video monitor that displays the time division stereoscopic display video signal output from the D/A conversion part 31 with an interlace system. The observer 1 wears liquid crystal shutter glasses to observe the image output to the video monitor 33.

[0031] The liquid crystal shutter glasses includes a field synchronous circuit 34, a multiplexer 35, a liquid crystal shutter L36, and a liquid crystal shutter R37. The field synchronous circuit 34 generates a field synchronized signal based on the vertical synchronizing signal extracted from the NTSC signal. The multiplexer 35 controls opening and closing of the liquid crystal shutter L36 and the liquid crystal shutter R37 while synchronizing with a field synchronized signal. That is, the output signal from the multiplexer 35 turns into a signal which opens the liquid crystal shutter L side with the field synchronized signal currently output from the field synchronous circuit 34 when the odd numbered field of the time division stereoscopic display image is

displayed in the video monitor 33. As a result, the liquid crystal shutter L36 switches to an opened state, and the liquid crystal shutter R37 switches to a closed state. Thus, since the shutter of a left eye opens and the shutter of a right eye closes, an observer looks at the image of the odd numbered field which is an image for a left eye only with a left eye. When the even numbered field of the time division stereoscopic display image is displayed, based on the field synchronized signal of the field synchronous circuit 34, the output signal of the multiplexer 35 turns into a signal which opens the liquid crystal shutter R side. As a result, the liquid crystal shutter L36 closes, the liquid crystal shutter R37 opens, and the image of the even numbered field which is an image for a right eye is seen by a right eye. Thus, right and left eyes are presented with two parallax images, respectively, and stereoscopic display observation is attained."

From the description above, FIG. 7, and FIG. 9, it may be concluded that the following matters are described.

" An image display system for observing a stereoscopic image with a stereoscopic display device 3 ([0001], [0014]), configured so that

an image for a right eye is stored in one of an odd numbered field and an even numbered field of a synthesis frame memory and an image for a left eye is stored in the other field; in this example, an image for a left eye shall be stored in an odd numbered field, and an image for a right eye shall be stored in an even numbered field ([0027]),

as a result, a synthetic image turns into a time division stereoscopic video in which the image for a left eye is stored in the odd numbered field and the image for a right eye is stored in the even numbered field ([0028]),

the time division stereoscopic display video signal is displayed with an interlace system ([0030]),

the observer 1 wears liquid crystal shutter glasses to observe the image output to the video monitor 33 ([0030]), when an odd numbered field of the time division stereoscopic video is displayed on the video monitor 33, the observer sees the odd numbered field, which is a video for a left eye, with only a left eye, and when an even numbered field of the time division stereoscopic video is displayed, the observer sees the even numbered field, which is a video for a right eye, with only a right eye ([0031])."

3 Comparison

The Invention and the Cited Invention are compared.

(1) "A method of driving the organic light emitting display" of the Cited Invention corresponds to "a method of driving the organic light emitting display" of the Amended Invention.

(2)

A The Cited Invention "applies an interlace system", and the interlace system displays an image using "an odd numbered frame period" and "an even numbered frame period". A period of a combination of "the odd numbered frame period" and "the even numbered frame period" of the Cited Invention, and "a display period for displaying one 3D image" of the Amended Invention are common in terms of being "a display period for displaying one image".

B Since an odd numbered period and an even numbered frame period are normally the same, "the odd numbered frame period" of the Cited Invention corresponds to "the first frame period corresponding to a first half of the display period" of the Amended Invention, and "pixels of the odd numbered lines" of the Cited Invention correspond to "the first sub pixels" of the Amended Invention.

Since "during the odd frame period, the pixels of the odd numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED" in the Cited Invention, the Cited Invention and "a step of charging first sub-pixels set to be in a non-emission state with a voltage corresponding to a right-data signal for a right glass of shutter glasses during a first frame period corresponding to a first half period of a display period" of the Amended Invention are common in terms of having "a step of charging first sub-pixels set to be in a non-emission state with a voltage corresponding to an image-data signal during a first frame period corresponding to a first half period of a display period".

C Similarly, "the even numbered frame period" of the Cited Invention corresponds to "the second frame period corresponding to a second half period of the display period" of the Amended Invention, and "the pixels of the even numbered lines" of the Cited Invention correspond to "the second subpixels" of the Amended Invention.

Since it may be concluded that, in the Cited Invention, "the pixels of the odd

numbered lines" and "the pixels of the even numbered lines" are alternatively arranged, and "the pixels of the even numbered lines" correspond to "the second subpixels ... arranged alternatively with the first subpixels" of the Amended Invention, the step of "during the even frame period, the pixels of the even numbered lines writes a data voltage and a threshold voltage of the driving transistor to the storage capacitor C in the pixel circuit and, simultaneously, applies a reverse bias voltage to the organic light emitting diode OLED" of the Cited Invention and "the step of charging second sub pixels, arranged alternately with the first sub pixels, set to be in a non-emission state, with a voltage corresponding to a left-data signal for a left glass of shutter glasses" of the Amended Invention are common in terms of being "the step of charging second sub pixels, arranged alternately with the first sub pixels, set to be in a non-emission state, with a voltage corresponding to an image data signal".

(3) Since "the odd numbered frame period" and "the even numbered frame period" of the Cited Invention correspond to "the first frame period" and "the second frame period" of the Amended Invention, respectively, "during the odd numbered frame period, each of the pixels of the even numbered lines emits light" and "during the even numbered frame period, each of the pixels of the odd numbered lines emits light" of the Cited Invention correspond to "the second sub-pixels are set to be in an emission state during the first frame period, and the first sub-pixels are set to be in an emission state during the second frame period" of the Amended Invention.

Therefore, the Invention and the Cited Invention have the following <corresponding features> and <different features>.

<Corresponding features>

"A method of driving the organic light emitting display includes steps of:

charging first sub-pixels set to be in a non-emission state with a voltage corresponding to an image-data signal during a first frame period corresponding to a first half period of a display period for displaying one image; and

charging second sub-pixels, arranged alternatively with the first sub-pixels, set to be in a non-emission state with a voltage corresponding to an image-data signal during a second frame period corresponding to a second half period of the display period, wherein

the second sub-pixels are set to be in an emission state during the first frame period, and the first sub-pixels are set to be in an emission state during the second

frame period."

<The different features>

(A) While the Invention specifies "a display period for displaying one 3D image", the Cited Invention does not have such a specification.

(B) While the Invention specifies charging the first sub pixels with a voltage corresponding to "the right-data signal for the right glass of the shutter glasses", the Cited Invention does not have any specifications on "the right-data signal for the right glass of the shutter glasses".

(C) While the Invention specifies charging the second sub pixels with a voltage corresponding to "the left-data signal for the left glass of the shutter glasses", the Cited Invention does not have any specifications on "the left-data signal for the left glass of the shutter glasses".

4 Judgment

Judgment is made by summing up the above-described <different features>.

On <the different features> (A), (B), (C)

For instance, as described in the Cited Document 2 and the Cited Document 3 (above-described 2 (2), (3)), in a stereoscopic image display device using shutter glasses, a stereoscopic image display device of an interlace system for displaying a right side image on odd numbered lines in one field and displaying a left side image on even numbered lines in the next one field is well known.

Since, in a display device, it is well known to display a 3D image in addition to a 2D image, it is a matter easily conceivable for a person skilled in the art that, as described in the Cited Invention, in an organic light emitting display applying an interlace system, a voltage of a right-data signal for a right glass of shutter glasses is to be written in a storage capacitor C in pixel circuits of odd lines during one field (first frame) period, and a voltage of a left-data signal for a left glass of shutter glasses is to be written in a storage capacitor C in pixel circuits of even lines in the next one field (second frame) period.

Therefore, it is nothing special to make a configuration associated with <the different features> (A), (B), (C) of the Amended Invention.

Even when the above-described different features are comprehensively determined, an effect exerted by the Invention would have been sufficiently predicted by a person skilled in the art based on the Cited Invention and the well-known arts and it cannot be said to be something special.

Therefore, since the Amended Invention could have been easily invented by a person skilled in the art based upon the Cited Document and well-known arts, the appellant should not be granted a patent for it independently at the time of patent application under the provisions of Article 29(2) of the Patent Law.

5 Closing on the Amendment

As described above, the amendment of the case should be dismissed, since it violates the provision of Article 126(7) of the Patent Act which is applied mutatis mutandis to the provision of Article 17-2(6) of the same Act, in accordance with the provisions of Article 53(1) of the Patent Law as applied mutatis mutandis by replacing certain terms pursuant to the provisions of Article 159(1) of the same Act.

No. 3 Regarding the Invention

1 The Invention

Since the amendment dated July 24, 2015 has been dismissed as described above, the invention (hereinafter referred to as "the Invention") according to Claim 4 of the Application is what is described as "Claim 4" before the Amendment of the above-described "No. 2 [Reason] 1 Amendment".

2 Cited Document

The Cited Document cited in the reasons for refusal stated in the examiner's decision and described matters thereof are as described in the above-described "No. 2 [Reason] 2 Cited Document and described matters thereof".

3 Comparison / Judgment

The Invention is what is obtained by eliminating the limitation associated with the Amendment examined in the above-described "No. 2 [Reason] 1 Amendment" from the Amended Invention.

Therefore, since the Amended Invention corresponding to what includes all matters specifying the Invention and further added with other matters specifying it, as shown in the "No. 2 [Reason] 4 Judgment", would have been easily made by a person skilled in the art based on the Cited Invention and the well-known arts, the Invention would have been also easily made by a person skilled in the art based on the Cited Invention and the well-known arts for similar reason.

4 Closing

As described above, since the appellant should not be granted a patent for the Invention in accordance with the provisions of Article 29(2) of the Patent Act, the application should be rejected without examining other claims.

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

May 16, 2016

Chief administrative judge: SHIMIZU, Minoru

Administrative judge: SAKAI, Nobuyoshi

Administrative judge: NAKATSUKA, Naoki