## Appeal decision

Appeal No. 2017-11029

Appellant MUFG Bank, Ltd.

Patent Attorney Takahashi Hayashi and Partner Patent Attorneys

The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2016-33952, entitled "INFORMATION PROVISION METHOD, INFORMATION PROVISION PROGRAM, AND INFORMATION PROVISION SYSTEM" (the application published on August 31, 2017, Japanese Unexamined Patent Application Publication No. 2017-152948) 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 February 25, 2016, a written amendment was submitted on May 12, 2017 against reasons for refusal notified on March 6, 2017, and an examiner's decision of refusal was issued on June 8, 2017. Against this, an appeal against the examiner's decision of refusal was made on July 25, 2017, and a written amendment was submitted on the same day.

#### No. 2 Decision to Dismiss Amendment

### [Conclusion]

The written amendment dated July 25, 2017 shall be dismissed.

## [Reason]

1 Summary of the written amendment dated July 25, 2017

The written amendment dated July 25, 2017 (hereinafter referred to as "the Amendment") is to amend the following Claim 1 and Claim 5 of the Scope of Claims amended by the written amendment dated May 12, 2017,

"[Claim 1]

An information provision system which transmits an answer message with respect to voice information of a user transmitted from a communication terminal, or an inquiry message when the answer message cannot be specified, to the communication terminal, and

displays a virtual operator, when reproducing the answer message or the inquiry message on the communication terminal configured to display the virtual operator, so that a part of the virtual operator makes a big motion as compared with the case where the answer message or the inquiry message is not reproduced." And "[Claim 5]

A program for causing a computer to execute receiving voice information including a question of a user transmitted from a communication terminal, and

receiving the question, as character information, from the communication terminal in accordance with volume data regarding the voice information.", to the following Claim 1 and Claim 4, respectively,

### "[Claim 1]

An information provision system which transmits an answer message with respect to voice information of a user transmitted from a communication terminal, or an inquiry message when the answer message cannot be specified, to the communication terminal, and

displays a virtual operator, when reproducing the answer message or the inquiry message on the communication terminal configured to display the virtual operator imitating a real business operator, so that a part of the virtual operator makes a big motion as compared to the case where the answer message or the inquiry message is not reproduced." and

### "[Claim 4]

A program for causing a computer to execute receiving voice information including a question of a user transmitted from a communication terminal, and

receiving the question, as character information, from the communication terminal when the question cannot be distinguished from other voice information, on the basis of volume data regarding the voice information."

# 2 Propriety of amendment

# (1) Regarding presence or absence of new matter

Regarding the amended matter of the invention according to Claim 4 after the amendment, "receiving voice information including a question of a user transmitted from a communication terminal, and

receiving the question, as character information, from the communication terminal when the question cannot be distinguished from other voice information, on the basis of volume data regarding the voice information",

according to the recitation, "receiving voice information including a question of a user transmitted from a communication terminal",

the "voice information" "includes a question of a user transmitted from a communication terminal", and according to the recitation, "receiving the question, as character information, from the communication terminal when the question cannot be distinguished from other voice information, on the basis of volume data regarding the voice information", the above amended matter means "receiving the question, as character information, from the communication terminal" "when the question cannot be distinguished from other voice information" on the basis of "volume data" regarding "voice information including a question of a user transmitted from a communication terminal". Accordingly, the amended matter substantially includes the following technical matter: "receiving a question of a user, as character information, from a communication terminal when the question of the user cannot be distinguished from other voice information on the basis of volume data regarding voice information including the question of the user transmitted from the communication terminal".

The following descriptions A to D related to the above amended matter included in the specification, etc. originally attached to the application (hereinafter referred to as "Originally attached specification, etc.") are examined below.

A The Originally attached specification [0026] includes the description, "The program can be configured to execute receiving volume data on the surroundings of a communication terminal, from the communication terminal, and receiving a question, as character information, from the communication terminal in accordance with the volume data." According to the description, the "volume data" in "in accordance with the volume data" are "volume data on the surroundings of a communication terminal", and do not mean "volume data regarding voice information including the question of the user", obviously.

B The Originally attached specification [0088] includes the description, "For example, when the user is prohibited to utter, when voice call from a communication terminal is prohibited, when the voice of the user cannot be distinguished from surrounding noise due to a noisy environment, or when the user uses a voice output unit 112 of the

communication terminal for other purposes (listening to music or viewing videos), the program may be configured to enter web-chat mode automatically or voluntarily by the user". Although the specification describes receiving a question from the communication terminal as character information when the question of the user cannot be distinguished from other voice information due to a noisy environment, a relation between the "surrounding noise" and the "other voice information" in the amended matter is unclear, and there is no description or indication about the basis for distinguishing "voice of a user" from "surrounding noise".

C The Originally attached specification [0092] includes the description, "For example, the program may be configured to measure the volume of the surroundings of the communication terminal 100 and transmit the volume data to an interaction server (Step 720), display on the display unit 106 that the mode shifts to web-chat mode when the volume is equal to or higher than a predetermined level (Step 722), and shift to the webchat mode automatically (Step 704). The measurement of volume of the surroundings can be performed, for example, after starting an application and before the user activates a voice input unit 110. The threshold for shifting to the web-chat mode may be, for example, equal to or higher than 90 decibels or equal to or higher than 110 decibels". The specification describes that the mode shifts to web-chat mode in accordance with measurement of volume of the surroundings of the communication terminal. described in the Originally specification [0119], the user starts the application, then activates the voice input unit 110 by operating an icon 300, and utters a question. "measurement of volume of the surroundings" in [0092] is performed after starting the application and before the user activates the voice input unit 110; i.e., before the user asks a question. Thus, the "measurement of volume of the surroundings" in [0092], which is performed before the user asks a question, does not include voice information including a question of the user, obviously.

D The Originally attached specification [0093] includes the description, "The program can be configured to enter the web-chat mode when the surrounding noise of the communication terminal 100 cannot be distinguished from the voice information input by the user. For example, when a voice recognition server cannot detect a section including voice information of the user even by executing voice section detection in analyzing the voice information, when the detected section is shorter than a predetermined time, or when the voice (question) of the user cannot be detected or analyzed due to noise which cannot be sufficiently removed from the input voice

information, an icon may be displayed on the display unit 106 for entering the web-chat mode simultaneously with information for entering the web-chat mode." According to the above description, the specification describes receiving a question as character information from a communication terminal when the question of the user cannot be distinguished from other voice information on the basis of a progress or a result of analyzing voice information by a voice recognition server, but does not describe using "volume data" in analyzing the voice information by the voice recognition server. Thus, there is no description or indication about receiving a question, as character information, from a communication terminal when the question of the user cannot be distinguished from other voice information on the basis of "volume data" regarding voice information including the question of the user transmitted from the communication terminal.

Accordingly, the Originally attached specification, etc. does not describe or indicate "receiving voice information including a question of a user transmitted from a communication terminal, and receiving the question, as character information, from the communication terminal when the question cannot be distinguished from other voice information, on the basis of volume data regarding the voice information".

Thus, the amended matter of the Invention according to Claim 4 after the amendment,

"receiving voice information including a question of a user transmitted from a communication terminal.

and receiving the question, as character information, from the communication terminal when the question cannot be distinguished from other voice information, on the basis of volume data regarding the voice information", introduces a new technical matter in relation to the technical matters derived by summing up all the descriptions in the Originally attached specification, etc.

It cannot be acknowledged that the Amendment including the above amended matter of the invention according to Claim 4 after the amendment has been made within the scope of matters described in the specification, the Scope of Claims, or drawings originally attached to the application.

Therefore, the Amendment does not satisfy the requirements stipulated in Article 17-2(3) of the Patent Act.

## (2) Judgment on independent requirements for patentability

As described in (1), the Amendment does not satisfy the requirements stipulated in Article 17-2(3) of the Patent Act. Furthermore, we will examine whether the Amendment including Claim 1 after the amendment satisfies independent requirements for patentability stipulated in Article 126(7) of the Patent Act which is applied mutatis mutandis in the provisions of Article 17-2(6) of the Patent Act.

#### A Invention after the amendment

The invention after the Amendment is acknowledged as specified by the matters recited in Claims 1 to 5 of the Scope of Claims amended by the Amendment. The invention according to Claim 1 (hereinafter referred to as "Invention after the amendment") is as follows.

"An information provision system which transmits an answer message with respect to voice information of a user transmitted from a communication terminal, or an inquiry message when the answer message cannot be specified, to the communication terminal, and

displays a virtual operator, when reproducing the answer message or the inquiry message on the communication terminal configured to display the virtual operator imitating a real business operator, so that a part of the virtual operator makes a big motion as compared to the case where the answer message or the inquiry message is not reproduced." (shown again)

#### **B** Cited Inventions

[Cited Invention, Cited Document 1]

Japanese Unexamined Patent Application Publication No. 2016-24765 (the application published on February 8, 2016, hereinafter referred to as "Cited Document 1"), which is cited in the reasons for refusal of the examiner's decision and is a publication distributed before the filing of the application, includes the following matters. (The underlines were added by the body.)

(A) "[0012]

<Definition>

"Interactive processing system": Q & A system customized to be adapted to a predetermined purpose.

"User": A person who asks a question via his or her terminal device connected to the interactive processing system.

"Administrator": A person who manages the interactive processing system and creates a content table, or the like, to be registered on the interactive processing system by use of a content table creation device. The administrator may be the "user".

"User question": An inquiry made from the user to the interactive processing system, which includes both a voice emitted by the user and a character string generated by converting the voice emitted by the user.

"User voice question": A "user question" including both a voice emitted by the user and electric signals generated by converting the voice.

"User character-string question": A "user question" which is used especially for indicating a character string (electric signals which specify the character string) generated by converting a user voice question to corresponding contents by voice recognition.

"Supposed question": An expected "user question", or question examples registered in advance on the content table.

"Answer content": All of the contents of responses made by the interactive processing system and associated with the "supposed question". Concepts including the following "repeated question" and "supposed answer".

<u>"Repeated question": A question for narrowing one "user question"</u> corresponding to multiple "answer contents", down to a concrete content of question.

"Supposed answer": A response other than the "repeated question", which is a reply prepared as an answer to the "user question".

"Content": A unit of record including combinations of "supposed question" and "answer contents", which sometimes includes "category" and "sub-category".

"Degree of correlation": An index indicating a degree of correlation showing how a first character string and a second character string are approximate to each other. When one character string is a correct answer and the other character string is a character string to be tested, a term "accuracy rate" is also applicable. A degree of approximation or correlation is calculated based on various arithmetic expressions on the basis of, for example, coincidence of a keyword included in a character string, importance of the keyword, and reliability of a character string to be tested."

# (B) "[0020]

FIG. 2 is a block diagram illustrating one example of a functional configuration of the interactive processing system 1. As shown in FIG. 2, the interactive processing system 1 includes a user terminal device 10 and a server unit 20. [0021]

The user terminal device 10 includes a first receiving unit 22, a first communication unit 24, an output unit 26, and an operation display unit 28. Each unit of the user terminal device 10 is implemented functionally, for example, by allowing a processor to execute programs stored in storage areas, such as a memory and a hard disk. [0022]

The first receiving unit 22 includes a microphone which converts, for example, a voice into electric signals. Accordingly, the first receiving unit 22 receives a question uttered by a user and converts it into a user voice question as voice information of electric signals. The first receiving unit 22 requests the first communication unit 24 to transmit the user voice question of electric signals.

[0023]

The first communication unit 24 transmits/receives various kinds of information over a predetermined network. For example, the first communication unit 24 transmits a user voice question of electric signals to the server unit 20 in response to a request from the first receiving unit 22, or receives an answer content, which is second voice information corresponding to the user voice question, from the server 20. [0024]

The output unit 26 includes, for example, a speaker. Accordingly, the output unit 26 outputs the answer content of electric signals received by the first communication unit 24 and converted into a voice.

[0025]

The operation display unit 28 receives various setting operations by a user or displays an answer content."

### (C) "[0026]

The server unit 20 includes, as illustrated in FIG. 1, a server management device 12, a voice recognition processing server 14, a language processing server 18, and a voice synthesis processing server 16. The server unit 20 may include one server device including all the above servers, or may be configured by combining two or more of the above servers."

[0027]

The server management device 12 includes, for example, a second communication unit 30 and a management unit 32. Each unit of the server management device 12 is implemented functionally by allowing the processor to execute programs stored in storage areas, such as a memory or a hard disk, for example. [0028]

The second communication unit 30 transmits/receives various kinds of information over a predetermined network. For example, the second communication unit 30 receives a user voice question from the user terminal device 10, transmits the received user voice question to the voice recognition processing server 14, or transmits an answer content to the user terminal device 10."

## (D) "[0041]

A search unit 46 searches all or part of contents (a plurality of answer contents) in a content table 58 on the basis of a user character-string question received by the second receiving unit 44, to obtain one of a supposed answer and a repeated question out of the answer contents corresponding to the user character-string question. Specifically, the search unit 46 calculates correlations between the user question character string and each of contents by searching the content table 58 with a predetermined arithmetic expression, and compares them to specify one content. If one content can be specified, it means that the user character-string question is specific enough to respond to, and an answer content recorded in the content is obtained. When one content cannot be specified by searching the content table 58 because a plurality of contents are likely to correspond, it means that the user character-string question is ambiguous. Thus, the search unit 46 searches further to specify a content storing a repeated question for narrowing down the ambiguous question, and obtains a repeated question recorded in the content."

### (E) "[0054]

For example, as shown in FIG. 5, a user asks a question (user voice question), "Tell me about mobile phone A", by voice from a user terminal device 10. The voice recognition server 14 to which the user voice question has been input executes voice recognition processing, and transmits a user character-string question generated by converting the user voice question to corresponding character strings, to the language processing server 18. In the language processing server 18, the search unit 46 specifies a content 59 of ID No. 1 recorded as "mobile phone A" in a first category field 58B of the content table 58 (FIG. 3) corresponding to the question, and acquires an answer content, which is a character string, for example, "What do you want to know about the mobile phone A?", as a repeated question, recorded in a body field 58F of the specified content 59, to be transmitted to the voice synthesis server 16. The voice synthesis server 16 executes voice synthesis processing to output to the user terminal device 10 a voice corresponding to the character strings.

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[0055] ... (Omitted) ... [0057]
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In response to that, when an additional user voice question, for example, "Tell me about home button", is input and a user character-string question corresponding thereto is transferred from the voice recognition server 14, the search unit 46 specifies ID No. 3 and No. 4, as contents 59 that "operation" corresponding to the question is classified in a second category field 58C of the content table 58, and specifies a content 59 of ID No. 3 which has the highest correlation with the character strings registered in the title 58E. The answer content recorded in the body field 58F, "The home button of the mobile phone A is ..." is acquired and output.

By narrowing down an answer content by repeating user questions and repeated questions while referring to the categories and corresponding categories, an answer content desired by the user can be provided as a reply on the third time at least."

In light of the above (A) to (E), the following matters are found.

According to (B) [0020], the "interactive processing system" includes the "user terminal device 10" and the "server unit 20".

According to (A) and (B) [0021], [0023], the "first communication unit 24" of the "user terminal device 10" "transmits a user voice question to the server unit 20", resulting in "transmitting a user voice question from the user terminal device 10 to the server unit 20".

According to (C), (D), and (E), a "user voice question" is processed between the server management device 12, the voice recognition processing server 14, the language processing server 18, and the voice synthesis processing server 16 constituting the "server unit 20", to transmit a "supposed answer" or a "repeated question" corresponding to the "user voice question" to the "user terminal device 10", resulting in that "the server 20 transmits to the user terminal device 10 a supposed answer or a repeated question corresponding to the user voice question".

According to (B) [0021], [0024], and [0025], the "user terminal device 10" "outputs" a "supposed answer" or a "repeated question" "converted into a voice". The "operation display unit 28" of the "user terminal device 10" is configured to "display an answer content". Thus, it can be said that "the user terminal device 10 outputs, by voice, the supposed answer or the repeated question, to be output on the operation display unit 28".

Therefore, it is acknowledged that Cited Document 1 describes the following invention (hereinafter referred to as "Cited Invention").

"An interactive processing system which transmits a user voice question from a user terminal device 10 to a server unit 20, wherein the server unit 20 transmits a supposed answer or a repeated question corresponding to the user voice question, to the user terminal device 10, and the user terminal device 10 outputs the supposed answer or the repeated question by voice and displays it on an operation display unit 28."

### [Cited Invention 2, Cited Document 2]

Japanese Unexamined Patent Application Publication No. 2015-28566 (the application published on February 12, 2015, hereinafter referred to as "Cited Document 2"), which is cited in the reasons for refusal of the examiner's decision and is a publication distributed before the filing of the application, includes the following matters.

## (F) "[0038]

The navigation device 1, which is mounted on a vehicle, has a function of communicating with a first center 3 or a second center 4 via a mobile phone 2, for example, as well as a function of route guidance similar to that of a general navigation device. The navigation device 1 includes, as shown in FIG. 1, a talk switch (hereinafter referred to as a talk SW) 11, a microphone (hereinafter referred to as a mic) 12, a display device 13, a speaker 14, a memory 15, a first communication unit 16, a second communication unit 17, and a control unit 18."

## (G) "[0058]

When the response systems are available, an agent display control unit 18F causes agents A and B corresponding to the respective response systems to be simultaneously displayed on the display device 13, as shown in FIG. 6 (A). The agent A in FIG. 6 is an image of an agent corresponding to a response system represented by the first center 3, and the agent B is an image of an agent corresponding to a response system represented by the second center 4. The agent is a character, such as an imaginary person or a personified animal."

## (H) "[0064]

In Step S113, the answer output unit 18D causes the speaker 14 to output response voice data from an answer-side center by voice using an answer-side center setting unit 18C. In the step, the speaker 14 outputs the response voice data of the answer-side center by voice, and an agent corresponding to the answer-side center is displayed relatively large, as shown in (B) and (C) in FIG. 6, and the image is displayed as if the agent is speaking. After Step S113, the process proceeds to Step S115. [0065]

When text data corresponding to the contents of the response voice data can be acquired together with the response voice data from the centers, the text may be displayed near the agent. Visual effect for displaying the image as if the agent is speaking may be designed as necessary."

(I) Referring to "(A) Display example during standby (S103)" and "(B) Display example during answer from the first center" in FIG. 6, the image shows that the agent closes his mouth during standby and opens it while answering.

Thus, it is acknowledged that Cited Document 2 describes the following invention (hereinafter referred to as "Cited Invention 2"): "A navigation device for displaying an agent on a display device, wherein the agent is displayed so as to open the mouth of the agent in outputting response voice data of an answer-side center from a speaker, as compared with a standby state, so as to display the agent as if it is speaking."

### [Cited Document 3]

The following matters are described together with drawings in Spontaneous Speech Dialogue System TOSBURG II -Using Multimodal Response and Speech Response Cancellation-, which is a publication newly cited and distributed before the filing of the application, written by Yoichi TAKEBAYASHI and others, IPSJ Technical Reports, Information Processing Society of Japan, November 13, 1992, Vol. 92, No. 89, pp. 93-100 (hereinafter referred to as "Cited Document 3").

## (J) "2. 2 Development of Spontaneous Speech Dialogue System

In applying the findings in Speaker Independent Large Vocabulary Word Recognition to a speech dialogue system, real-time processing or noise resistance which is important in applications in the real world is required, and it is desired to understand "unrestricted spontaneous speech" on sentence patterns or forms of speech [15] [16]. In a system for Spontaneous speech, it is necessary to handle various aspect of spoken

languages including environmental noise [17], unnecessary words, restating, omission, pause, or words to be excluded [18]; however, it is difficult to describe such phenomena completely as grammar. It is also necessary to advance a dialogue smoothly even with ambiguity or false recognition generated by recognition processing, without giving anxiety to a user, and real-time processing or media usage other than speech is also required [12].

In consideration of the above points, the writers aimed to construct a system which can naturally talk with a computer in a general spoken language without imposing any restrictions on unspecified user. For implementing a natural dialogue under the restrictions of the current technical level, an order in a hamburger shop, which is very familiar usually, is selected as a task. For implementing the system, we tried integration of various types of knowledge and media, such as voice synthesis for dialogue, knowledge processing for dialogue control, or using visual media." (p. 95 left column l. 1-1. 24)

## (K) "3.2 Multimodal Response Generation

In order to smoothly advance a dialogue with a system, it is required to present an internal state of a computer or a dialogue status to a user clearly, and it is important how to use a multimedia as a response from the system. Audio media can serve as a key of information transmission timing or dialogue progress, while visual media are characterized by simultaneously transmitting a huge amount of information by transmitting multiple pieces of information in parallel.

The response generation unit of TOSBURG uses audio media using synthesized speech and visual media such as response text, animation, or icons, to generate a multimodal response from a response meaning expression transmitted from a dialogue control unit. A speech response is generated by rule-based synthesis using a terminal-analog formant synthesizer. A standard form of a response sentence corresponding to the contents of a response expressed by the response meaning expression is determined, an elliptical expression is used in accordance with the situation, and phonological processing is performed on the generated response sentence to generate a synthesized speech (FIG. 4). The prosody of the synthesized speech is applied using the Fujisaki Model [20]. For emphasizing information, a change of intonation in a corresponding position is increased. The response sentence text visually displays a text of the response sentence which is the same as a speech response. Audio media is temporary, disadvantageously. However, the response sentence text can cover the shortcomings.

An animation showing ordered items, the number of the items, and a shop clerk is presented, and a simple and clear response is output to a user (see FIG. 5). The facial expression of the shop clerk is designed not to be excessively realistic. The graphics showing the ordered items and the quantity thereof visually indicates an internal state of the system. In the shop clerk animation, his or her mouth is moved in accordance with a speech response, to concretely show an attention getter who seems to actually move. An atmosphere is created where the user can naturally perform voice input. The clerk, who is a communication target, is clearly presented, and the user can speak with a natural volume without special attention. The facial expression of the shop clerk is changed to a smile face or a sorry face in accordance with the situation of the dialogue, which facilitates understanding of the response from the system (see FIG. 6)." (p. 96 l. 18-p. 97 l. 12)

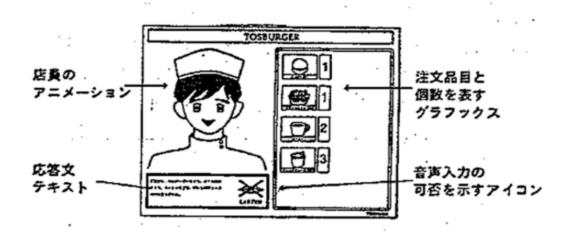


図5. 視覚メディアによる応答

店員のアニメーション 応答文テキスト 注文品目と個数を表すグラフックス 音声入力の可否を示すアイコン is available

図5 視覚メディアによる応答

Shop clerk animation
Response sentence text
Graphics showing order items and quantity
Icon indicating whether or not voice input

FIG. 5 Response by visual media

### [Cited Document 4]

Japanese Unexamined Patent Application Publication No. 2010-79103 (the application published on April 8, 2010, hereinafter referred to as "Cited Document 4"),

which is newly cited and is a publication distributed before the filing of the application, includes the following matters with drawings.

# (L) "[0040]

As shown in FIG. 4, when a visitor stands in front of a voice interactive apparatus which functions as an automatic reception apparatus, the voice interactive apparatus detects a visitor by an infrared sensor 5 (FIG. 2) (Step S101).

The voice interactive apparatus having detected the visitor acquires a predetermined utterance speech (dialogue) and a list of input items, referring to a visitor reception scenario described later (Step S102).

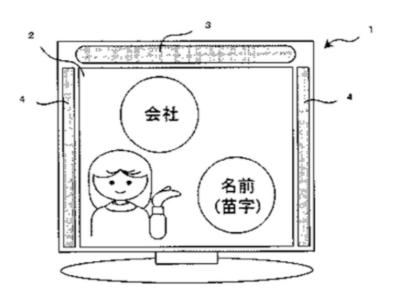
[0041]

Zone areas corresponding to the input items are displayed on a touch panel display 2 (Step S103), and a voice guidance is emitted (Step S104).

[0042]

For example, as shown in FIG. 6, on the touch panel display 2, a character image of a receptionist, and a "company name input zone" area or a "name input zone" area for the visitor to be input by voice by the visitor are displayed in circular areas with characters "Company" and "Name (Last name)", respectively. A voice guidance is output from the speaker 4 as if the receptionist says, "May I help you? May I have your name and department, please?""





【図6】 [FIG. 6] 会社 Company

# 名前(苗字) Name (Last name)

### [Cited Document 5]

Japanese Unexamined Patent Application Publication No. 2010-153956 (the application published on July 8, 2010, hereinafter referred to as "Cited Document 5"), which is cited in the reasons for refusal of the examiner's decision and is a publication distributed before the filing of the application, includes the following matters with drawings.

(M) "[0028]

### (A) Basic configuration of the system

FIG. 1 is a system configuration diagram illustrating an overview of the entire configuration of the visitor reception system 1 of this embodiment. In FIG. 1, the visitor reception system 1 is a system of a reception service for visitors who visit a building, a company, or other structures, for example. This example shows a system installed in a company.

[0029]

The visitor reception system 1 includes, for example, a reception terminal 20 (visitor reception apparatus) disposed near an entrance of a company, a DB server 10 comprising known personal computers, IP phone units 60 arranged for each of employees of the company, and an IP-PBX (Internet Protocol Private Branch eXchange) which is a known switching unit for circuit switching of the IP phone units 60.

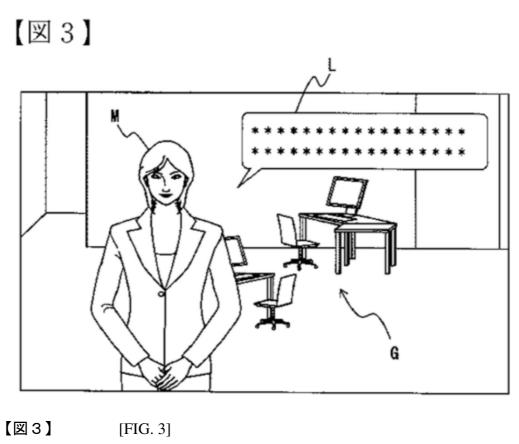
[0030]

The reception terminal 20 includes a terminal body 20A, and a touch panel 210, a microphone 207 and a speaker 208 connected to the terminal body 20A. [0031]

The speaker 208 converts a voice signal input from the terminal body 20A into a voice to be output, and functions as notification means (audio notification means in this example) which gives notification to a visitor. The microphone 207 functions as a voice input means, and converts the voice input by the visitor into voice information to be output to the terminal body 20A.

[0032] ... (Omitted) ... [0034]

FIG. 3 illustrates one example of a display screen of the touch panel 210. In this screen, an imaginary person M for reception service (hereinafter referred to as virtual receptionist M, as necessary) generated by a drawing program described later is displayed with an office-image background G. A text L (abbreviated as '\*\*\*' in the figure) corresponding to the voice emitted from the speaker 208 is also displayed."



According to Cited Documents 3 to 5, the matter, "in a voice interactive system, displaying a person imitating a real business operator", is a well-known matter (hereinafter referred to as "the well-known matter").

## C Comparison / Judgment

(A) Comparing the Invention after the amendment and the Cited Invention, the Cited Invention "transmits a user voice question from a user terminal device 10 to a server unit 20". Thus, the "user terminal device 10" in the Cited Invention corresponds to the "communication terminal" in the Invention after the amendment. The "user voice question" in the Cited Invention is included in the "voice information of a user" in the Invention after the amendment.

- (B) The "supposed answer" in the Cited Invention, which is a response to a user voice question, is included in the "answer message" in the Invention after the amendment. The "repeated question" in the Cited invention, which is an answer content when one content cannot be specified because a plurality of contents are likely to correspond, referring [0041] in the Cited Document, corresponds to the "inquiry message when the answer message cannot be specified" in the Invention after the amendment.
- (C) The description in the Cited Invention, "transmits a supposed answer or a repeated question to the user terminal device 10", is included in the recitation in the Invention after the amendment, "transmits an answer message or an inquiry message when the answer message cannot be specified, to the communication terminal".
- (D) The recitation in the Invention after the amendment, "on the communication terminal configured to display the virtual operator imitating a real business operator", and the description in the Cited Invention, "the user terminal device 10" "displays" "the supposed answer or the repeated question" "on an operation display unit 28", have the following common feature: "in a communication terminal configured to display a predetermined phenomenon".
- (E) The description in the Cited Invention, "the user terminal device 10 outputs the supposed answer or the repeated question by voice", corresponds to the recitation in the Invention after the amendment, "reproducing the answer message or the inquiry message on the communication terminal".
- (F) The "interactive processing system" in the Cited Invention, which provides an answer (information) with respect to a user question, is included in the "information provision system" in the Invention after the amendment.

In light of the above comparison, the Invention after the amendment and the Cited Invention have the following corresponding feature and different feature: (Corresponding Feature)

"An information provision system which transmits an answer message with respect to voice information of a user transmitted from a communication terminal, or an inquiry message when the answer message cannot be specified, to the communication terminal, and

reproduces the answer message or the inquiry message on the communication terminal configured to display a predetermined phenomenon."

(Different Features)

Regarding the "predetermined phenomenon" in the corresponding feature, the Invention after the amendment displays "a virtual operator imitating a real business operator", while the Cited Invention does not display the virtual operator.

Correspondingly, the Invention after the amendment "displays the virtual operator, when reproducing the answer message or the inquiry message on the communication terminal so that a part of the virtual operator makes a big motion compared with when the answer message or the inquiry message is not reproduced", while the Cited Invention does not include such specification.

The different features are examined below.

Regarding the recitation in the Invention after the amendment, "a part of the virtual operator makes a big motion",

the Originally attached specification [0071] includes the following description:

"In reproducing the above various messages in the voice output unit 112, the mouth or eyes of the virtual operator may be moved as if the virtual operator is actually speaking. Alternatively, the virtual operator may be designed to perform gestures for explanation by moving hands, or the like. Thus, the program can be configured so that a part of the virtual operator makes a big motion as compared to the case where the message is not reproduced."

Therefore, it is interpreted that the recitation, "a part of the virtual operator makes a big motion", may include motions of the virtual operator, such as moving the mouth or eyes, or moving hands, as if the virtual operator is actually speaking.

Cited Invention 2 is "a navigation device for displaying an agent on a display device, wherein the agent is displayed so as to open the mouth of the agent in outputting response voice data of an answer-side center from a speaker, as compared with a standby state, so as to display the agent as if it is speaking." (shown again)

In light of the above interpretation, it is obvious that the description in Cited Invention 2, "open the mouth of the agent", is included in the recitation in the Invention after the amendment, "a part of the virtual operator makes a big motion".

The Cited Invention and Cited Invention 2 belong to a common technical field of voice automatic response system. Facilitation of media communication is a well-known problem. As a means for solving the problem, it has been known that an avatar is displayed and moved (see, for example, Japanese Unexamined Patent Application Publication No. 2010-250761 [0002]-[0005]). Thus, a person skilled in the art could have easily conceived of applying Cited Invention 2, as means for solving the well-known problem to the Cited Invention to display an agent on the operation display unit

28 of the user terminal device 10, and displaying the agent so as to open the mouth of the agent in outputting a supposed answer or a repeated question by voice in the user terminal device 10, as compared with standby state, in order to display the agent as if it is speaking. Considering that Cited Document 2 [0058] indicates that the "agent" may be "a person" and that the matter, "in a voice interactive system, displaying a person imitating a real business operator", is a well-known matter, the idea of employing "a virtual operator imitating a real business operator" as the "agent" is only exertion of ordinary creativity of a person skilled in the art.

The effect of the Invention after the amendment is also within the scope that can predicted from the Cited invention, Cited Invention 2, and the well-known matter.

The Appellant alleges as follows in the written appeal: "Even though Cited Document 2 describes that one of multiple virtual operator images simultaneously displayed on the display device is displayed larger relative to the other images during outputting of voice data received from the outside and the image is displayed as if it is speaking, it aims to provide 'a response control system which can eliminate the time and effort of a user for selecting a response system to be used when a plurality of response systems for making a response corresponding to a voice input of the user are available', and it is different from the object of the invention described in Cited Document 1, "to provide a content table creation program and device for making a reply with respect to an appropriate answer content for a user question to a user". Thus, it is considered impossible to apply the technical ideas described in Cited Document 2 to the invention described in Cited Document 1."

The above allegation is examined below. To be sure, Cited Document 2 (which corresponds to Cited Document 2 by the body) mainly aims to eliminate the time and effort of a user for selecting a response system to be used for response. As described in Cited Document 2 [0059] as follows, "as a technique for displaying an agent corresponding to a certain response system, a technique disclosed in Japanese Unexamined Patent Application Publication No. 2006-195578 may be applied, for example", techniques for displaying an agent have been known. The above idea is only extraction of Cited Invention 2 from Cited Document 2 on the basis of the viewpoint of the technique for displaying an agent. There is no particular reasonable reason why the problem to eliminate the time and effort of a user for selecting the response system in Cited Document 2 cannot be separated from the technique for displaying an agent disclosed in Cited Document 2.

Thus, there is no error in findings of Cited Invention 2 from Cited Document 2, and the reason for applying Cited Invention 2 to the Cited Invention is described as above.

Therefore, the Appellant's allegation cannot be accepted.

Accordingly, the Invention after the amendment could have been easily invented by a person skilled in the art based on the Cited Invention, Cited Invention 2, and the well-known matter. Thus, the Appellant should not be granted a patent independently at the time of patent application under the provisions of Article 29(2) of the Patent Act.

### 3 Concluding Remarks

As described above, the Amendment, which violates the provisions of Article 17-2(3) and Article 126(7) of the Patent Act which is applied mutatis mutandis in the provisions of Article 17-2(6) of the Patent Act, should be dismissed under the provisions of Article 53(1) of the Patent Act applied mutatis mutandis by replacing certain terms pursuant to Article 159(1) of the Patent Act.

## No. 3 Regarding the Invention

#### 1 The Invention

The written amendment dated July 25, 2017 was dismissed as above. The invention according to Claim 1 of the Application (hereinafter referred to as "the Invention") is recognized as below recited in Claim 1 of the Scope of Claims amended by the written amendment dated May 12, 2017.

"An information provision system which transmits an answer message with respect to voice information of a user transmitted from a communication terminal, or an inquiry message when the answer message cannot be specified, to the communication terminal, and

displays a virtual operator, when reproducing the answer message or the inquiry message on the communication terminal configured to display the virtual operator, so that a part of the virtual operator makes a big motion as compared to the case where the answer message or the inquiry message is not reproduced." (shown again)

# 2 Cited inventions

The Cited Invention and Cited Invention 2 are as recognized in "B Cited inventions" in "(3) Judgment on independent requirements for patentability" in "2 Propriety of amendment" in "No. 2 Decision to Dismiss Amendment".

3 Comparison / Judgment

Comparing the Invention with the Cited Invention, the Invention is to omit the limitation, "imitating a real business operator" regarding the "virtual operator" from the Invention after the amendment.

Accordingly, as the Invention after the amendment which limits the "virtual operator" included in the configuration of the Invention to a "virtual operator imitating a real business operator", as examined in "C Comparison/Judgment" in "(3) Judgment on independent requirements for patentability" in "2 Propriety of amendment" in "No. 2 Decision to Dismiss Amendment", could be easily conceived on the basis of the Cited Invention, Cited Invention 2, and the well-known matter, the Invention also could be easily conceived for the same reason.

4 Closing

As described above, the Invention could have been easily invented based on the Cited Invention, Cited Invention 2, and the well-known matter. Thus, the appellant should not be granted a patent for the invention under the provisions of Article 29(2) of the Patent Act.

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

October 13, 2017

Chief administrative judge: YOSHIDA, Takayuki

Administrative judge: KANEDA, Takayuki

Administrative judge: OTSUKA, Ryohei