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Kamiya et al.

(54) **COMMUNICATION PROCESSING SYSTEM, COMMUNICATION PROCESSING METHOD, COMMUNICATION PROCESSING DEVICE, AND CONTROL METHOD AND CONTROL PROGRAM OF COMMUNICATION PROCESSING DEVICE**

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USPC **379/265.12**; 379/265.13

(57) **ABSTRACT**

A communication processing system according to the present invention is a communication processing system including user communication terminals each operated by a user and responder communication terminals each operated by a responder responding to an inquiry from the user. The communication processing system includes: a responder communication terminal information storing means for associating and storing each of the responder communication terminals and a responder attribute of the responder operating the responder communication terminal; and a connection controlling means for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal.

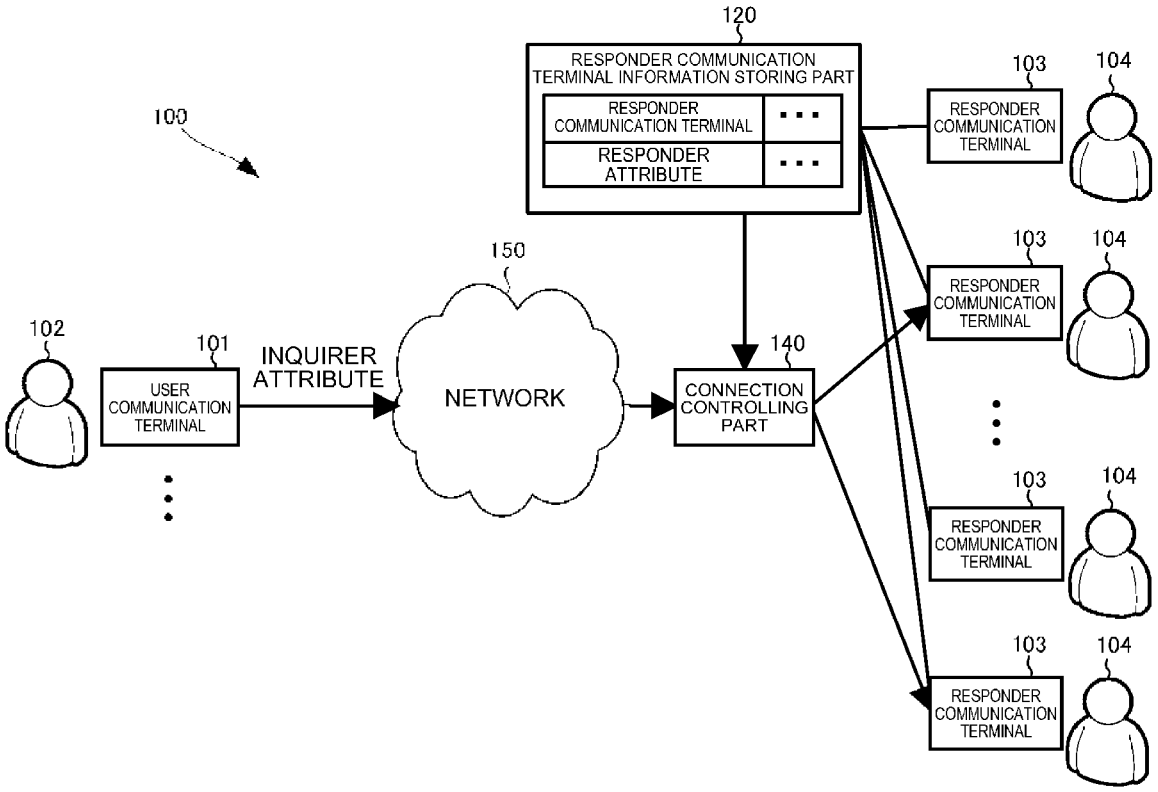
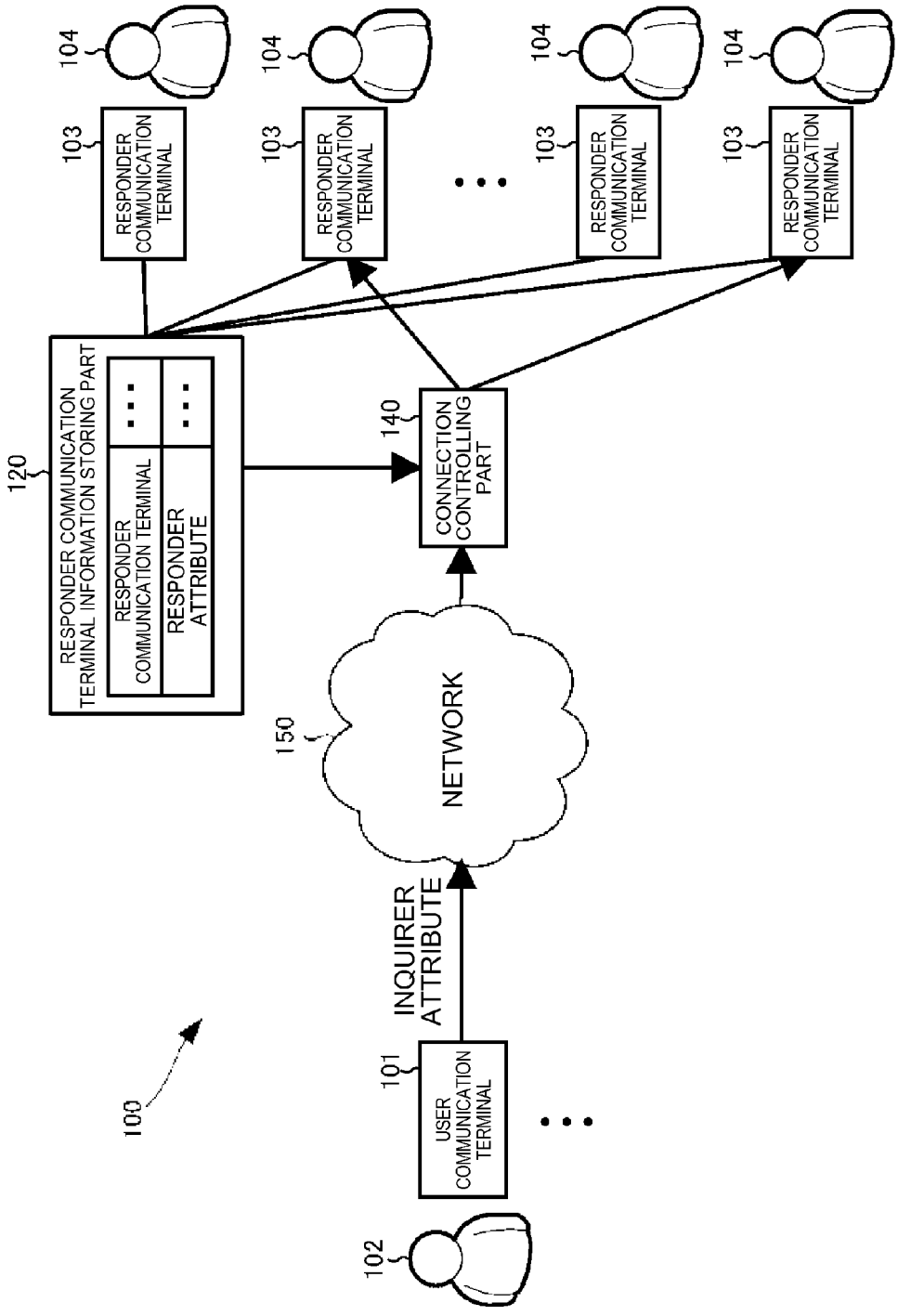


FIG. 1


100
101
USER COMMUNICATION TERMINAL
102
INQUIRER ATTRIBUTE
150
NETWORK
140
CONNECTION CONTROLLING PART
120
RESPONDER COMMUNICATION TERMINAL INFORMATION STORING PART
RESPONDER COMMUNICATION TERMINAL
RESPONDER ATTRIBUTE
103
RESPONDER COMMUNICATION TERMINAL
104

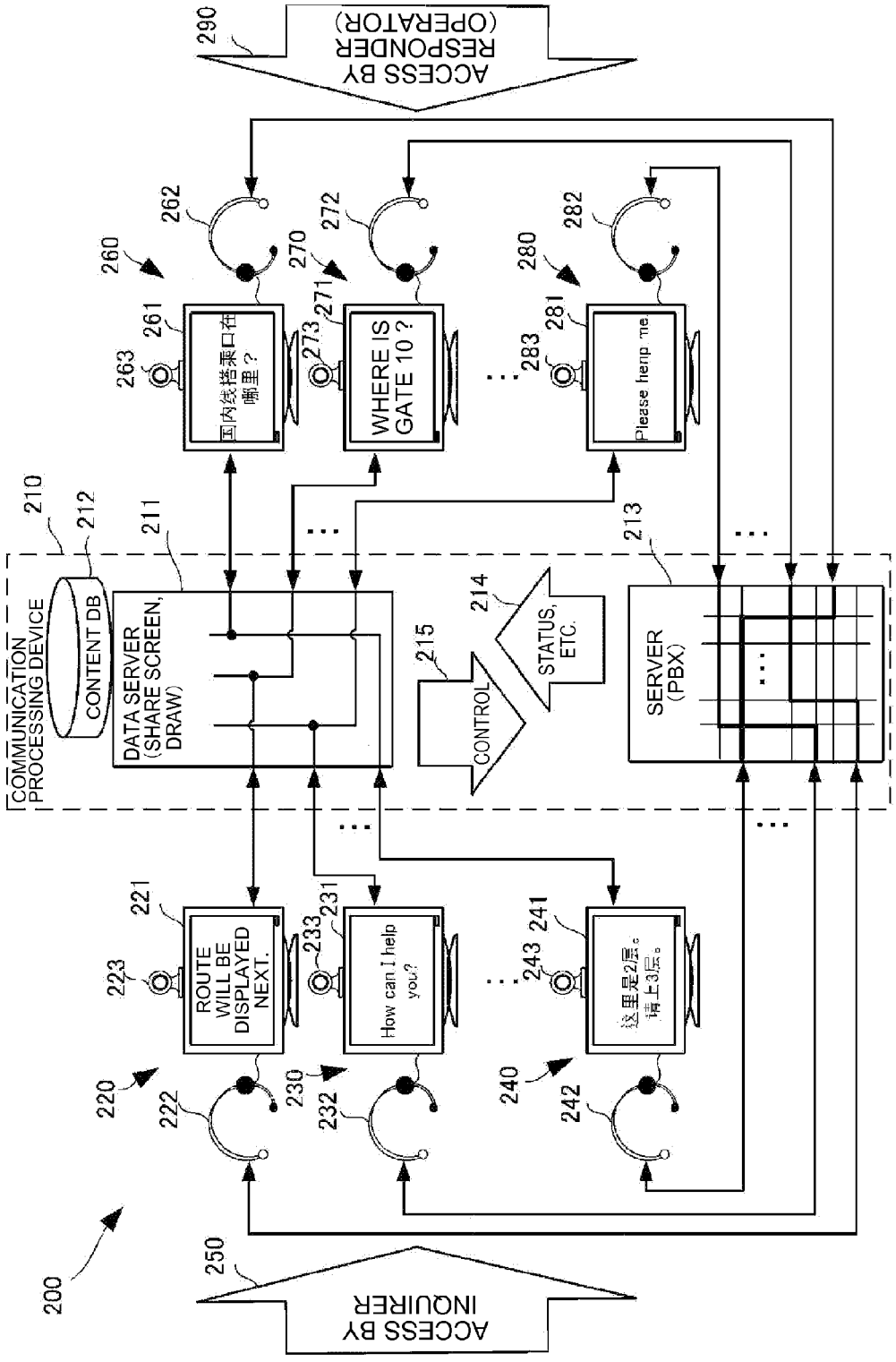

ACCESS BY RESPONDER (OPERATOR)
290
260
262
270
272
280
282
261
271
281
263
273
283
国内线搭乘口在哪里？
WHERE IS GATE 10 ?
Please help me
210
212
211
213
COMMUNICATION PROCESSING DEVICE
CONTENT DB
DATA SERVER (SHARE SCREEN, DRAW)
214
STATUS, ETC.
215
CONTROL
SERVER (PBX)
221
231
241
223
233
243
ROUTE WILL BE DISPLAYED NEXT.
How can I help you?
这里是2层。请上3层。
220
222
230
232
240
242
200
250
ACCESS BY INQUIRER

FIG. 2

FIG. 3

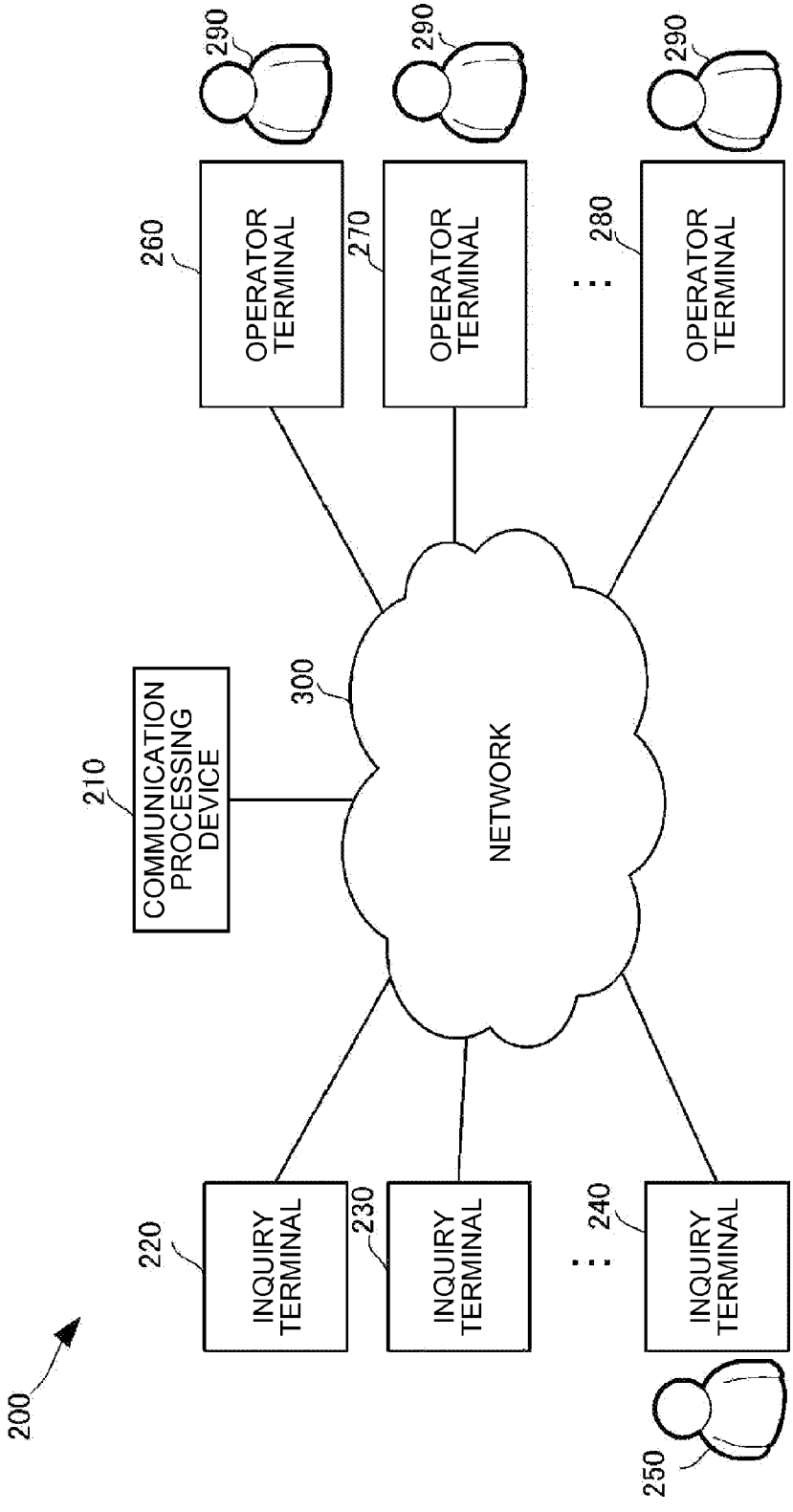

200
INQUIRY TERMINAL
220
INQUIRY TERMINAL
230
INQUIRY TERMINAL
240
250
COMMUNICATION PROCESSING DEVICE
210
NETWORK
300
OPERATOR TERMINAL
260
OPERATOR TERMINAL
270
OPERATOR TERMINAL
280
290
290
290

FIG. 4

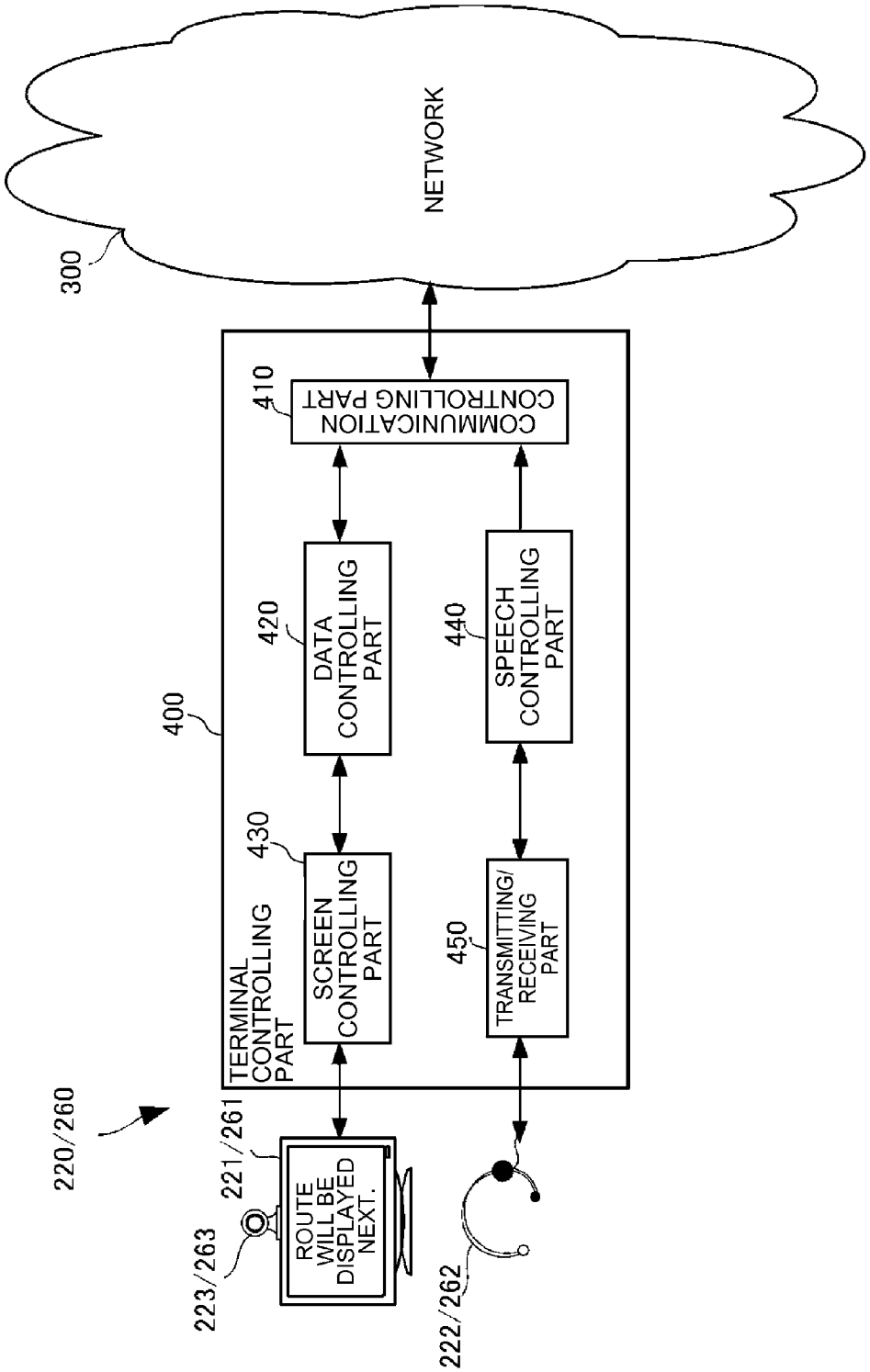

NETWORK
300
COMMUNICATION CONTROLLING PART
410
DATA CONTROLLING PART
420
SPEECH CONTROLLING PART
440
400
TERMINAL CONTROLLING PART
SCREEN CONTROLLING PART
430
TRANSMITTING/ RECEIVING PART
450
220/260
221/261
ROUTE WILL BE DISPLAYED NEXT.
223/263
222/262

FIG. 5

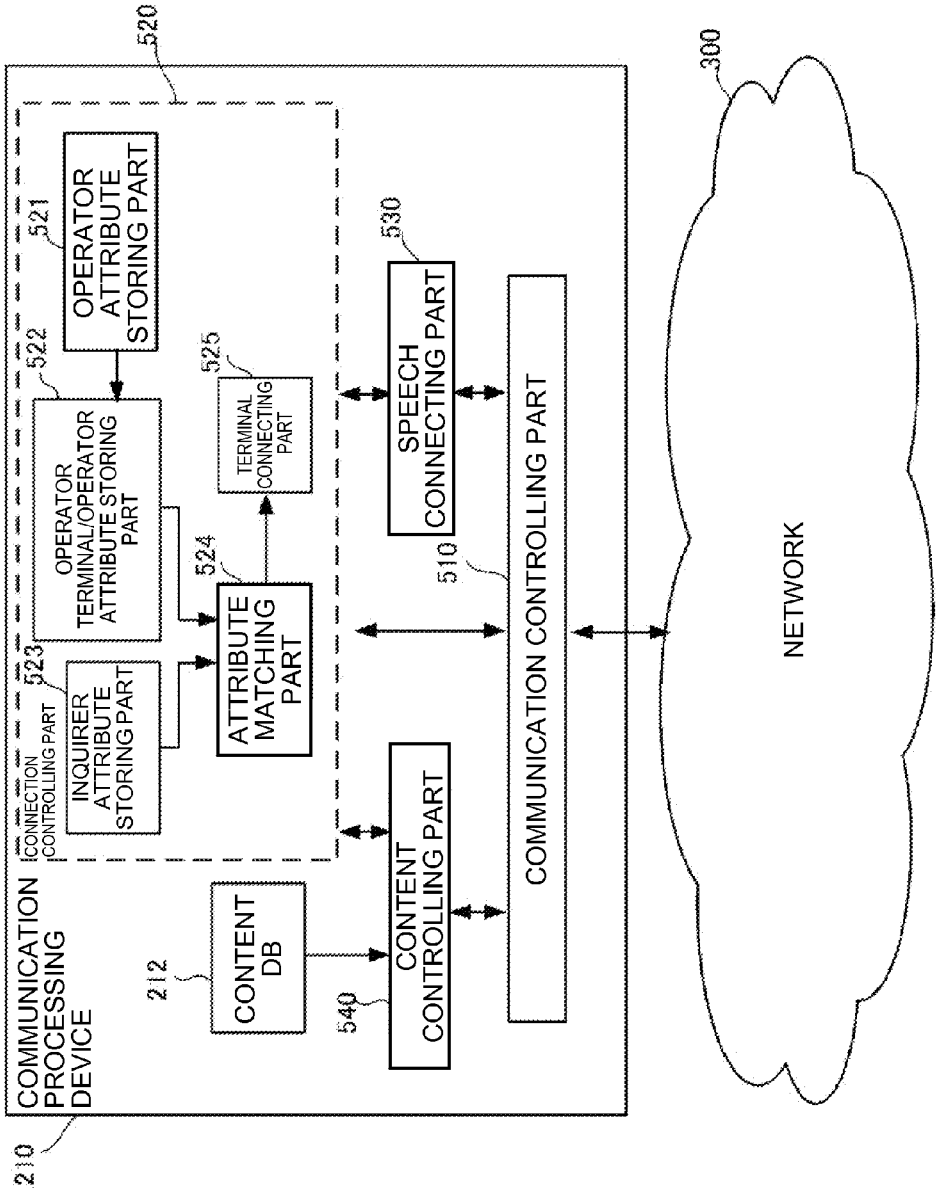

210
COMMUNICATION PROCESSING DEVICE
212
CONTENT DB
540
CONTENT CONTROLLING PART
COMMUNICATION CONTROLLING PART
510
530
SPEECH CONNECTING PART
520
521
OPERATOR ATTRIBUTE STORING PART
522
OPERATOR TERMINAL/OPERATOR ATTRIBUTE STORING PART
523
INQUIRER ATTRIBUTE STORING PART
CONNECTION CONTROLLING PART
524
ATTRIBUTE MATCHING PART
525
TERMINAL CONNECTING PART
300
NETWORK

FIG. 6A

521

611 OPERATOR ID	612 CATEGORY A (JAPANESE) (GROUP NUMBER: 1111)	613 CATEGORY B (CHINESE) (1112)	614 CATEGORY C (KOREAN) (1113)	615 CATEGORY D (ENGLISH) (1114)	...	620 OPERATOR TERMINAL ID
OPERATOR 01	○		○			
OPERATOR 02		○		○		
OPERATOR 03	○		○			
OPERATOR 04		○		○		
OPERATOR 05	○			○		
OPERATOR 06		○				
OPERATOR 07			○			
OPERATOR 08				○		
OPERATOR 09	○		○			
OPERATOR 10		○		○		

FIG. 6B

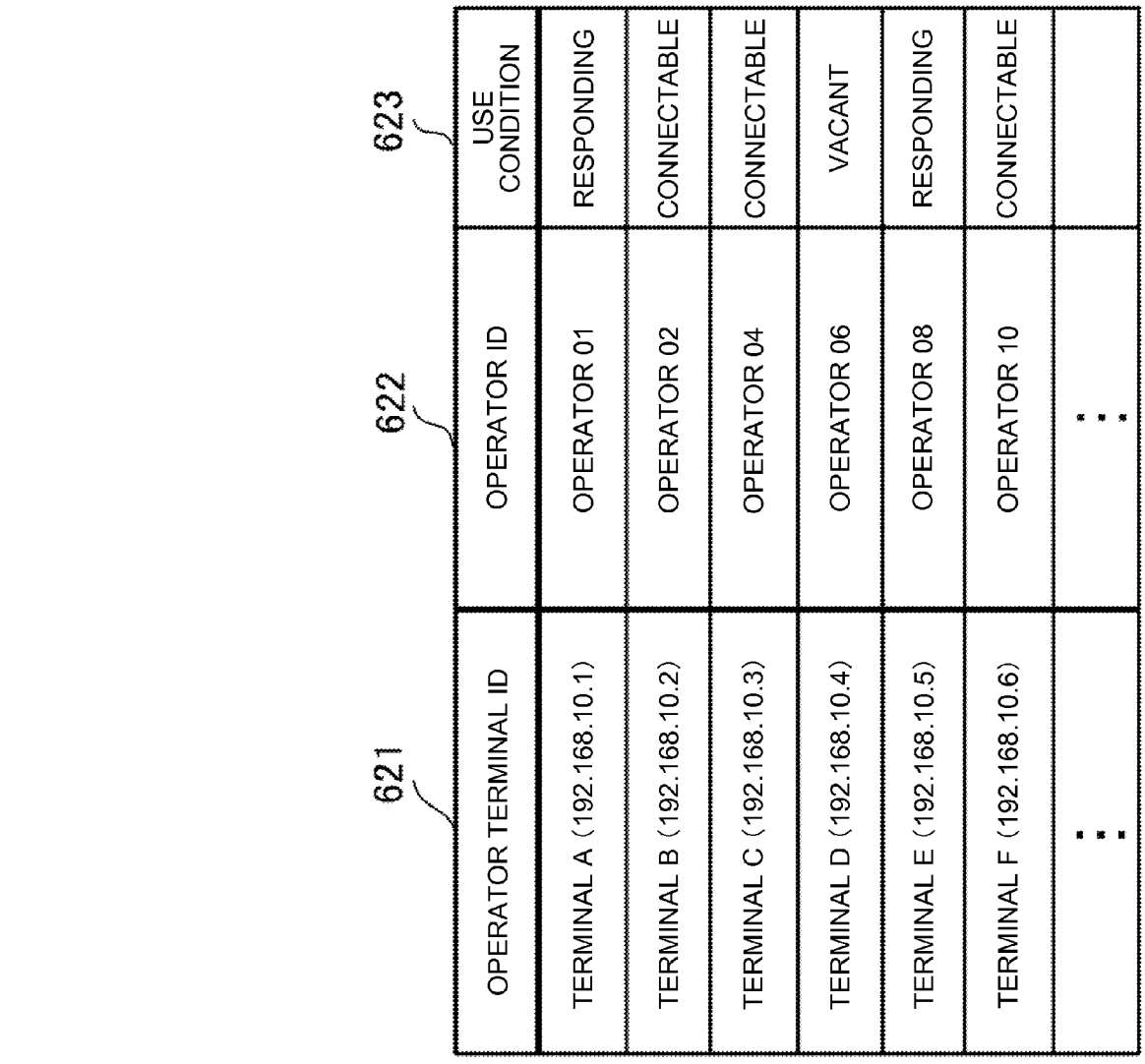

600
621
622
623
OPERATOR TERMINAL ID
OPERATOR ID
USE CONDITION
TERMINAL A (192.168.10.1)
OPERATOR 01
RESPONDING
TERMINAL B (192.168.10.2)
OPERATOR 02
CONNECTABLE
TERMINAL C (192.168.10.3)
OPERATOR 04
CONNECTABLE
TERMINAL D (192.168.10.4)
OPERATOR 06
VACANT
TERMINAL E (192.168.10.5)
OPERATOR 08
RESPONDING
TERMINAL F (192.168.10.6)
OPERATOR 10
CONNECTABLE

FIG. 6C

522

611 OPERATOR ID	612 CATEGORY A (JAPANESE) (GROUP NUMBER:1111)	613 CATEGORY B (CHINESE) (1112)	614 CATEGORY C (KOREAN) (1113)	615 CATEGORY D (ENGLISH) (1114)	...	630 OPERATOR TERMINAL ID
OPERATOR 01	○		○			TERMINAL A (192.168.10.1)
OPERATOR 02		○		○		TERMINAL B (192.168.10.2)
OPERATOR 03	○		○			
OPERATOR 04		○		○		TERMINAL C (192.168.10.3)
OPERATOR 05	○			○		
OPERATOR 06		○				TERMINAL D (192.168.10.4)
OPERATOR 07			○			
OPERATOR 08				○		TERMINAL E (192.168.10.5)
OPERATOR 09	○		○			
OPERATOR 10		○		○		TERMINAL F (192.168.10.6)

FIG. 7

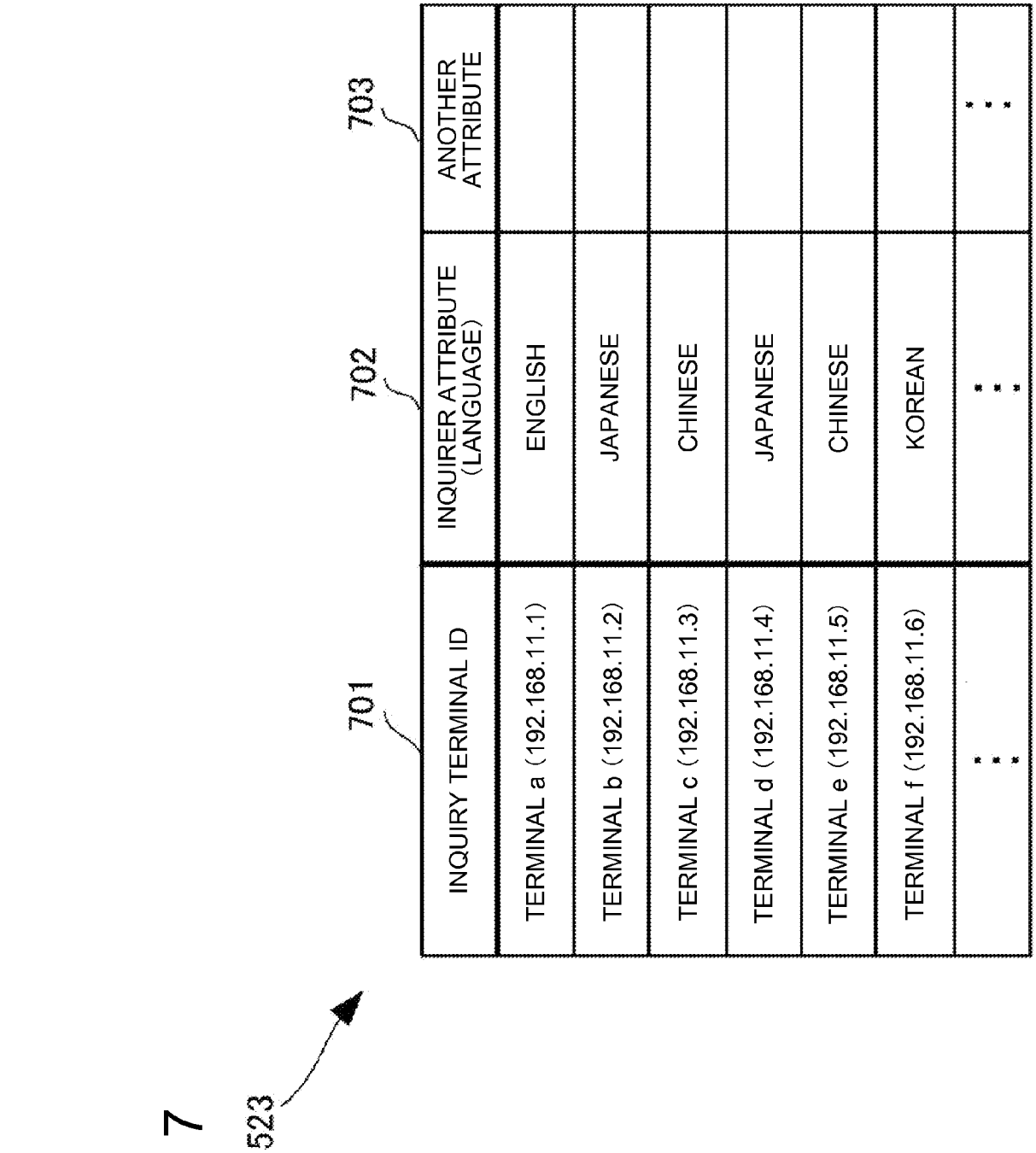

523
701
702
703
INQUIRY TERMINAL ID
INQUIRER ATTRIBUTE (LANGUAGE)
ANOTHER ATTRIBUTE
TERMINAL a (192.168.11.1)
ENGLISH
TERMINAL b (192.168.11.2)
JAPANESE
TERMINAL c (192.168.11.3)
CHINESE
TERMINAL d (192.168.11.4)
JAPANESE
TERMINAL e (192.168.11.5)
CHINESE
TERMINAL f (192.168.11.6)
KOREAN

FIG. 8

212

801 USED LANGUAGE	802 CONTENT OF INQUIRY	803 TARGET OF INQUIRY	804 CONTENT ID
JAPANESE	INQUIRY ABOUT DESTINATION IN AIRPORT	BOARDING GATE	JP11
		PROCEDURE COUNTER	JP12
		SHOP	JP13
		⋮	
	INQUIRY ABOUT SIGHTSEEING OUTSIDE AIRPORT	IN CITY	JP21
		SIGHTSEEING IN NEIGHBORHOOD	JP22
		SIGHTSEEING TO DISTANCE	JP23
		⋮	
	⋮		
ENGLISH	INQUIRY ABOUT DESTINATION IN AIRPORT	BOARDING GATE	EG11
		PROCEDURE COUNTER	EG12
		SHOP	EG13
		⋮	
	OUTSIDE AIRPORT	⋮	EG2x
CHINESE	IN AIRPORT	⋮	CH1x
	OUTSIDE AIRPORT	⋮	CH2x
⋮			

FIG. 9

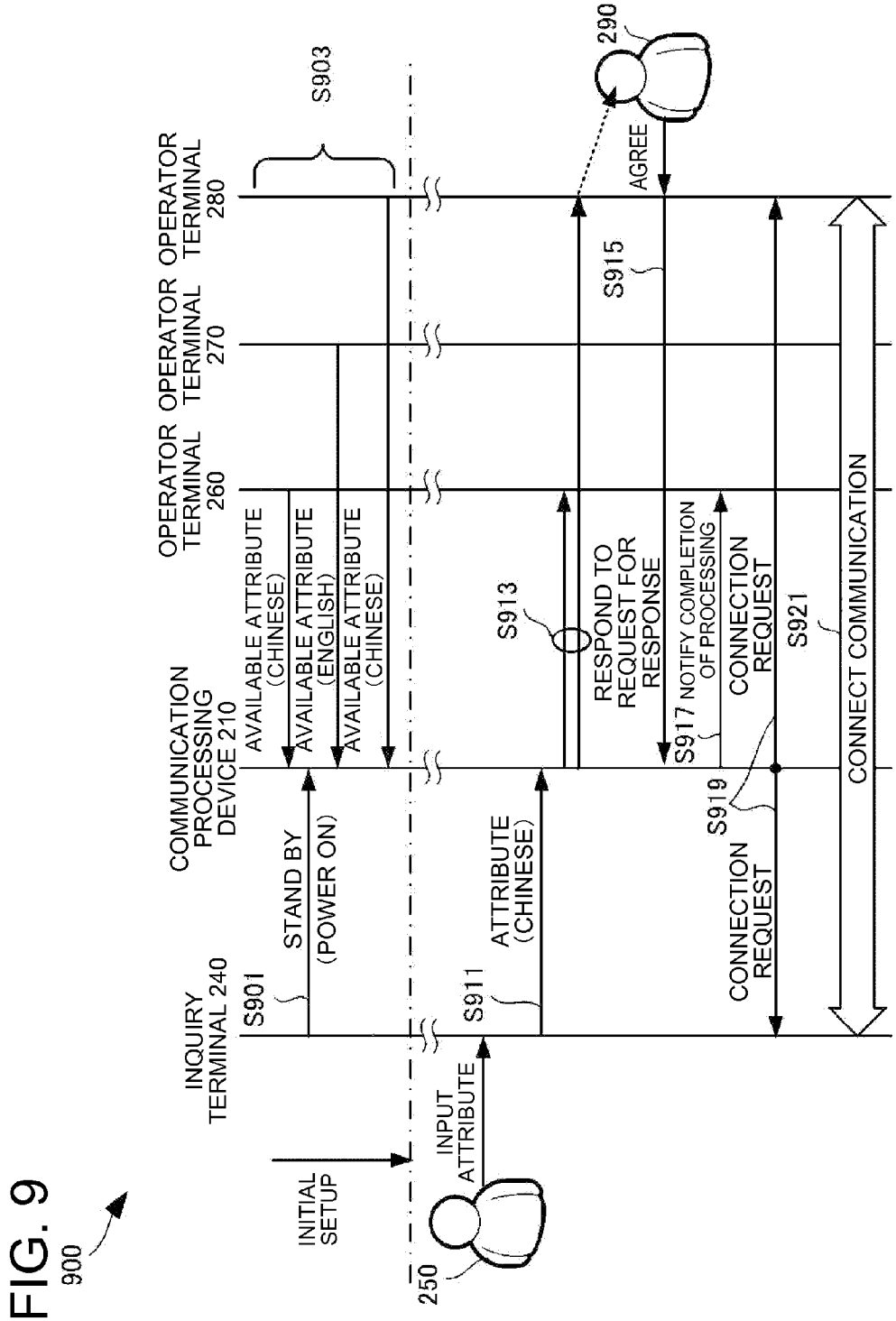

900
250
INITIAL SETUP
INPUT ATTRIBUTE
INQUIRY TERMINAL 240
COMMUNICATION PROCESSING DEVICE 210
OPERATOR TERMINAL 260
OPERATOR TERMINAL 270
OPERATOR TERMINAL 280
290
S901
STAND BY (POWER ON)
AVAILABLE ATTRIBUTE (CHINESE)
AVAILABLE ATTRIBUTE (ENGLISH)
AVAILABLE ATTRIBUTE (CHINESE)
S903
S911
ATTRIBUTE (CHINESE)
S913
RESPOND TO REQUEST FOR RESPONSE
AGREE
S915
S917 NOTIFY COMPLETION OF PROCESSING
S919
CONNECTION REQUEST
CONNECTION REQUEST
S921
CONNECT COMMUNICATION

FIG. 10A

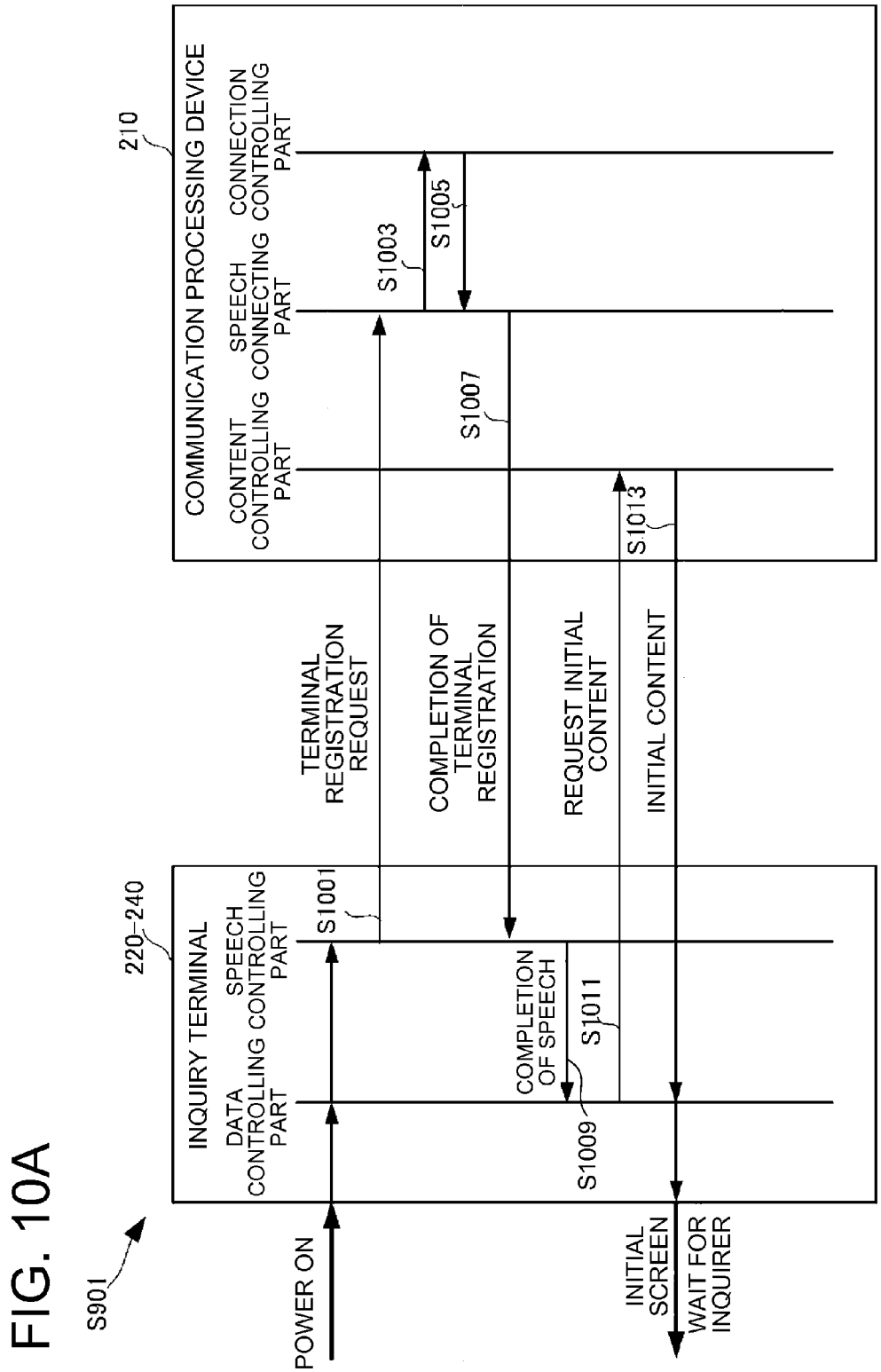

S901
220-240
INQUIRY TERMINAL
DATA CONTROLLING PART
SPEECH CONTROLLING PART
210
COMMUNICATION PROCESSING DEVICE
CONTENT CONTROLLING PART
SPEECH CONNECTING PART
CONNECTION CONTROLLING PART
POWER ON
S1001
TERMINAL REGISTRATION REQUEST
S1003
S1005
S1007
COMPLETION OF TERMINAL REGISTRATION
S1009
COMPLETION OF SPEECH
S1011
REQUEST INITIAL CONTENT
S1013
INITIAL CONTENT
INITIAL SCREEN
WAIT FOR INQUIRER

FIG. 10B

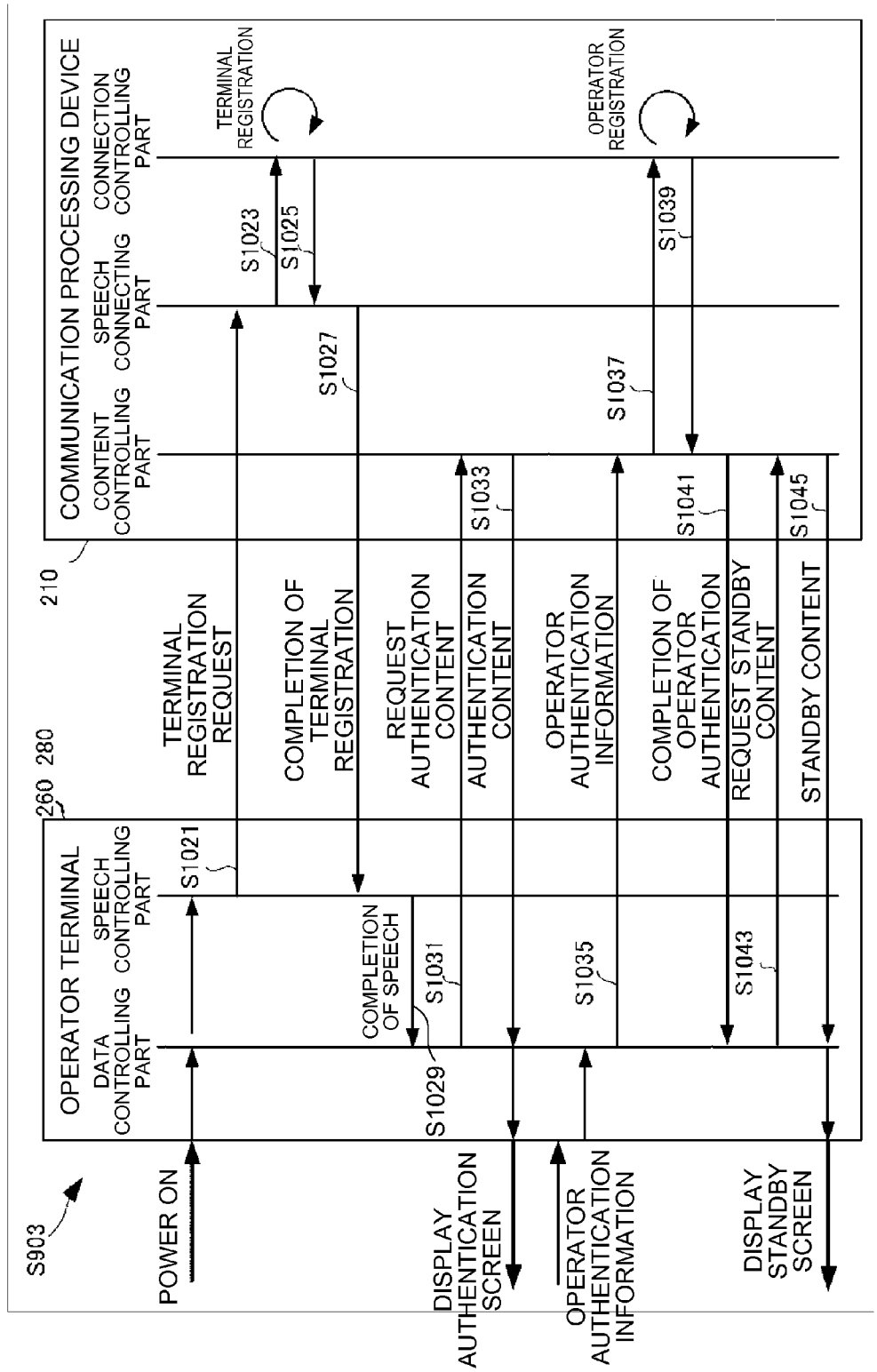

S903
POWER ON
OPERATOR TERMINAL
DATA CONTROLLING PART
SPEECH CONTROLLING PART
260
280
S1021
TERMINAL REGISTRATION REQUEST
210
COMMUNICATION PROCESSING DEVICE
CONTENT CONTROLLING PART
SPEECH CONNECTING PART
CONNECTION CONTROLLING PART
TERMINAL REGISTRATION
S1023
S1025
COMPLETION OF TERMINAL REGISTRATION
S1027
COMPLETION OF SPEECH
S1029
S1031
REQUEST AUTHENTICATION CONTENT
S1033
AUTHENTICATION CONTENT
DISPLAY AUTHENTICATION SCREEN
OPERATOR AUTHENTICATION INFORMATION
S1035
OPERATOR AUTHENTICATION INFORMATION
OPERATOR REGISTRATION
S1037
S1039
COMPLETION OF OPERATOR AUTHENTICATION
S1041
REQUEST STANDBY CONTENT
S1043
STANDBY CONTENT
S1045
DISPLAY STANDBY SCREEN

FIG. 11

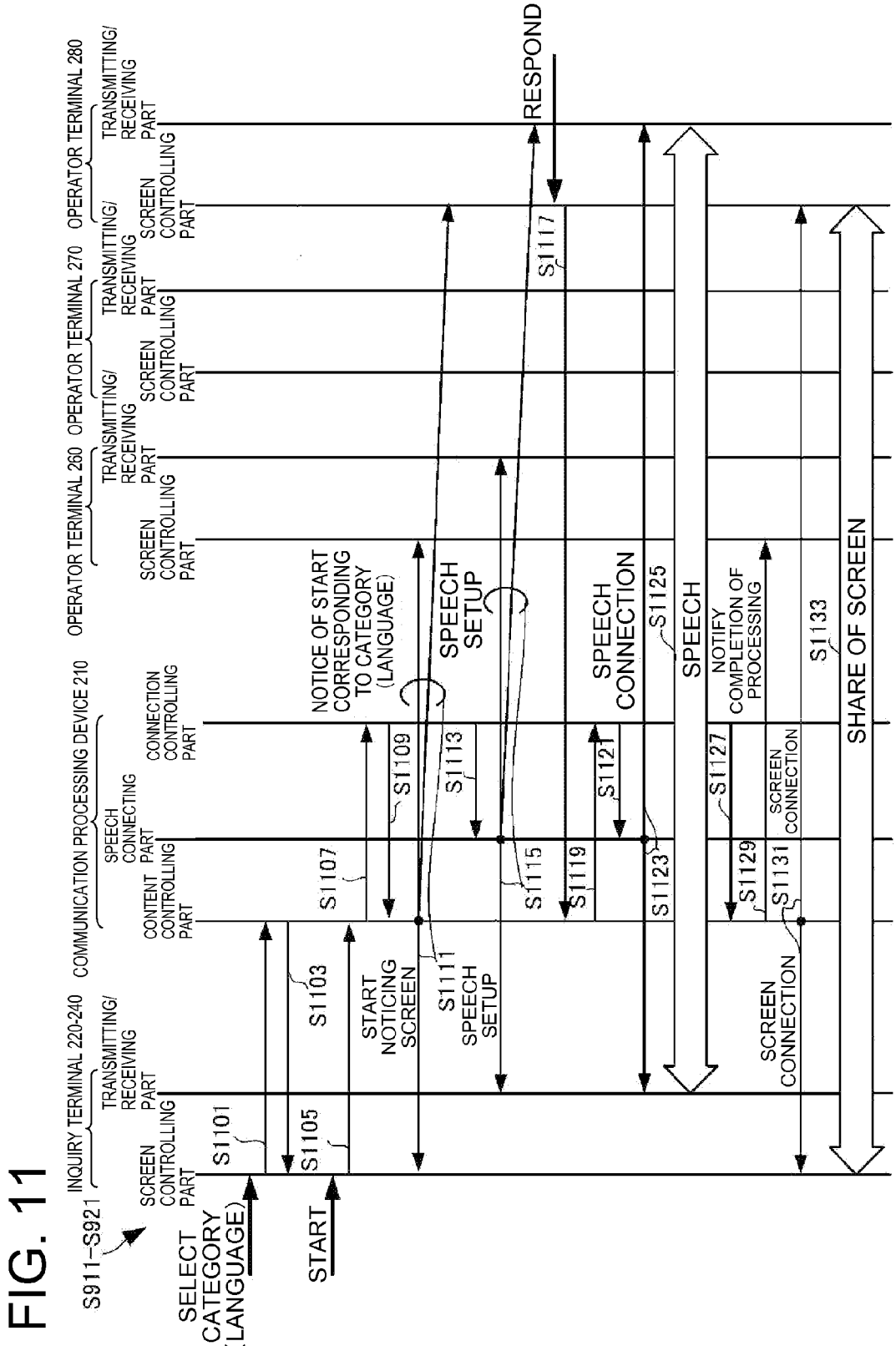

S911-S921
INQUIRY TERMINAL 220-240
COMMUNICATION PROCESSING DEVICE 210
OPERATOR TERMINAL 260
OPERATOR TERMINAL 270
OPERATOR TERMINAL 280
SCREEN CONTROLLING PART
TRANSMITTING/ RECEIVING PART
CONTENT CONTROLLING PART
SPEECH CONNECTING PART
CONNECTION CONTROLLING PART
SELECT CATEGORY (LANGUAGE)
START
S1101
S1103
S1105
S1107
START NOTICING SCREEN
S1109
NOTICE OF START CORRESPONDING TO CATEGORY (LANGUAGE)
S1111
SPEECH SETUP
S1113
SPEECH SETUP
S1115
RESPOND
S1117
S1119
S1121
SPEECH CONNECTION
S1123
S1125
SPEECH
S1127
NOTIFY COMPLETION OF PROCESSING
S1129
SCREEN CONNECTION
S1131
SCREEN CONNECTION
S1133
SHARE OF SCREEN

FIG. 12

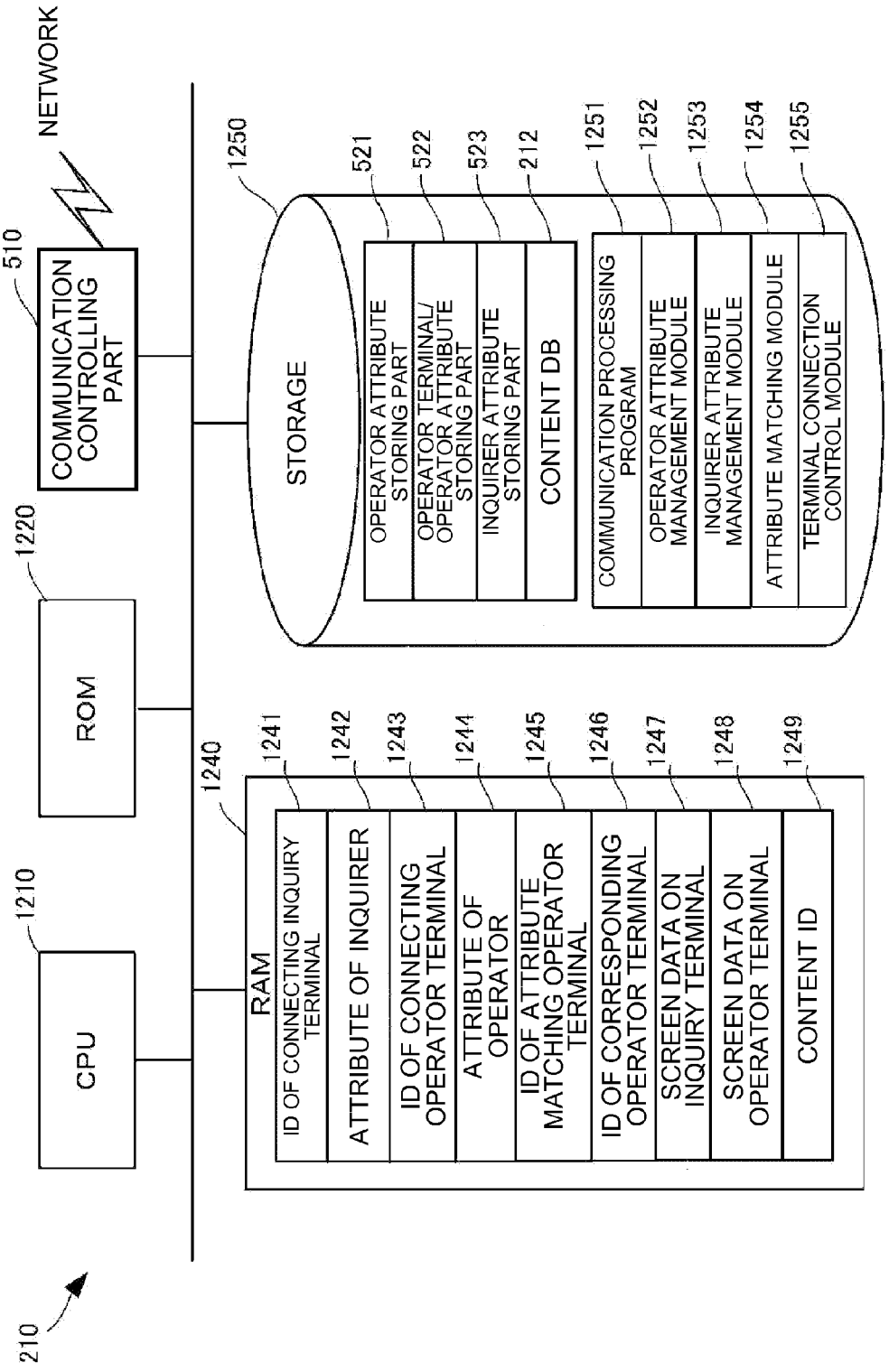

210
CPU
1210
ROM
1220
RAM
1240
1241 ID OF CONNECTING INQUIRY TERMINAL
1242 ATTRIBUTE OF INQUIRER
1243 ID OF CONNECTING OPERATOR TERMINAL
1244 ATTRIBUTE OF OPERATOR
1245 ID OF ATTRIBUTE MATCHING OPERATOR TERMINAL
1246 ID OF CORRESPONDING OPERATOR TERMINAL
1247 SCREEN DATA ON INQUIRY TERMINAL
1248 SCREEN DATA ON OPERATOR TERMINAL
1249 CONTENT ID
COMMUNICATION CONTROLLING PART
510
NETWORK
STORAGE
1250
521 OPERATOR ATTRIBUTE STORING PART
522 OPERATOR TERMINAL/ OPERATOR ATTRIBUTE STORING PART
523 INQUIRER ATTRIBUTE STORING PART
212 CONTENT DB
1251 COMMUNICATION PROCESSING PROGRAM
1252 OPERATOR ATTRIBUTE MANAGEMENT MODULE
1253 INQUIRER ATTRIBUTE MANAGEMENT MODULE
1254 ATTRIBUTE MATCHING MODULE
1255 TERMINAL CONNECTION CONTROL MODULE

FIG. 13A

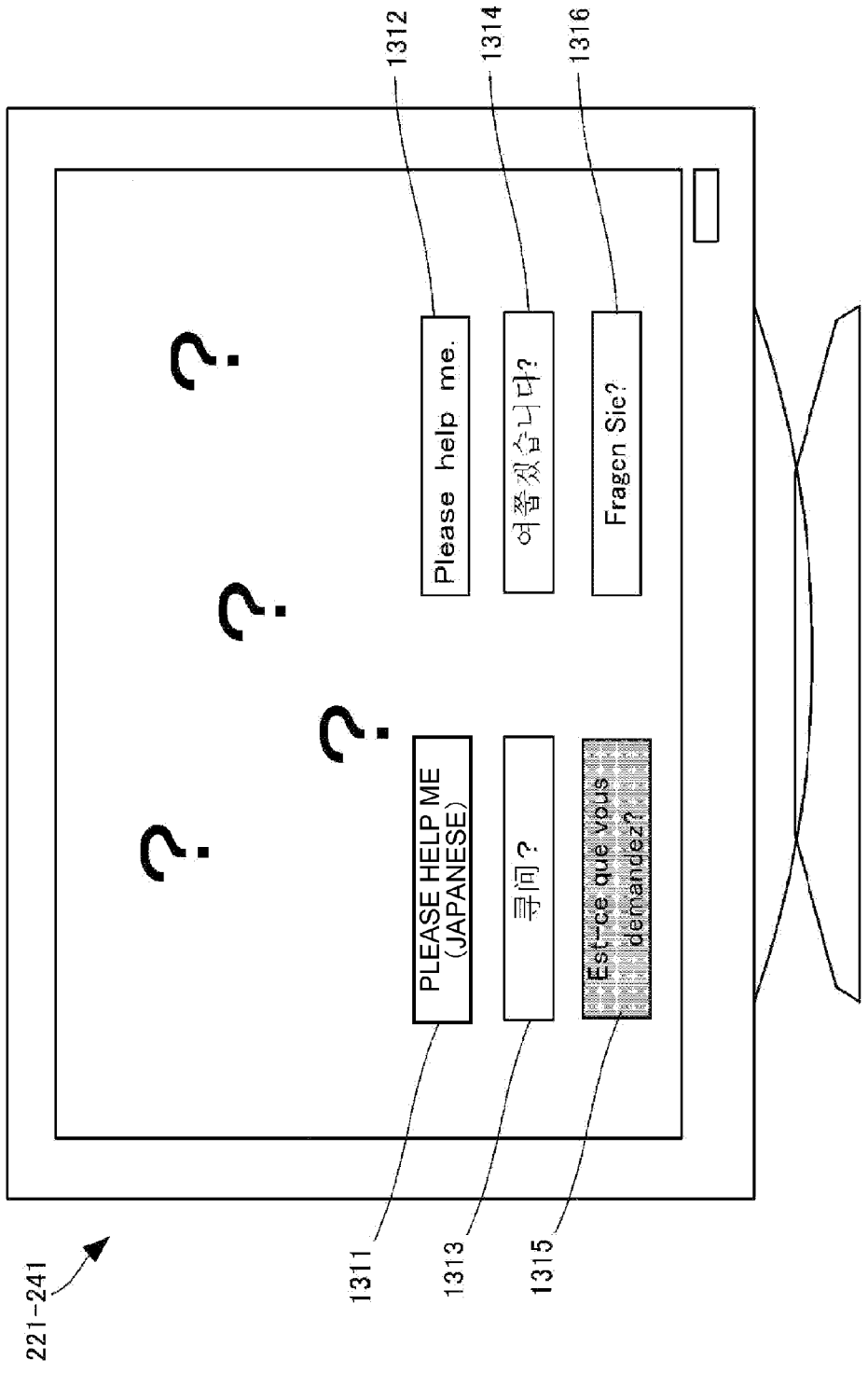

1312
1314
1316
Please help me.
여쭙겠습니다?
Fragen Sie?
PLEASE HELP ME (JAPANESE)
寻问？
Est-ce que vous demandez?
1311
1313
1315
221-241

FIG. 13B

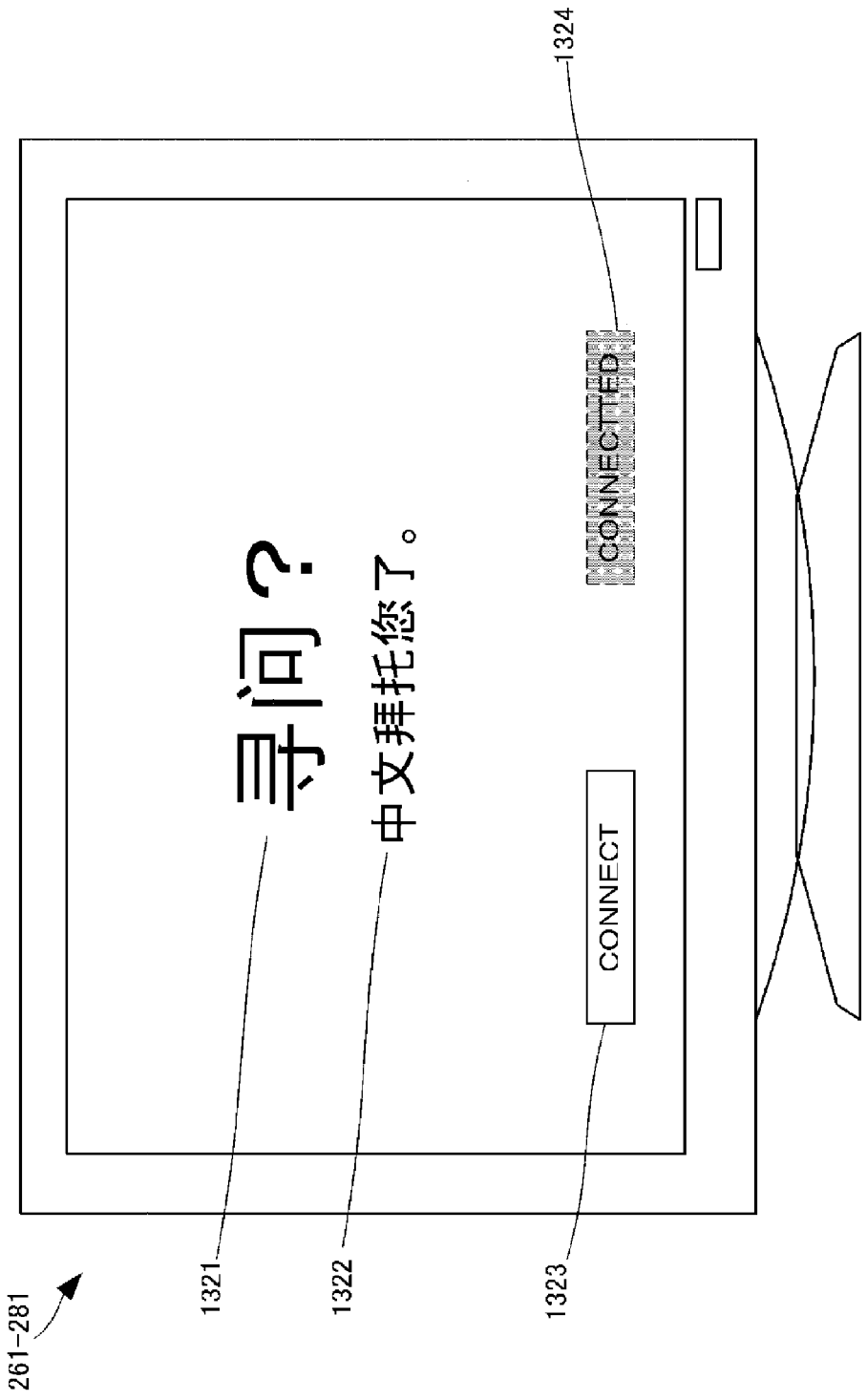


FIG. 14A

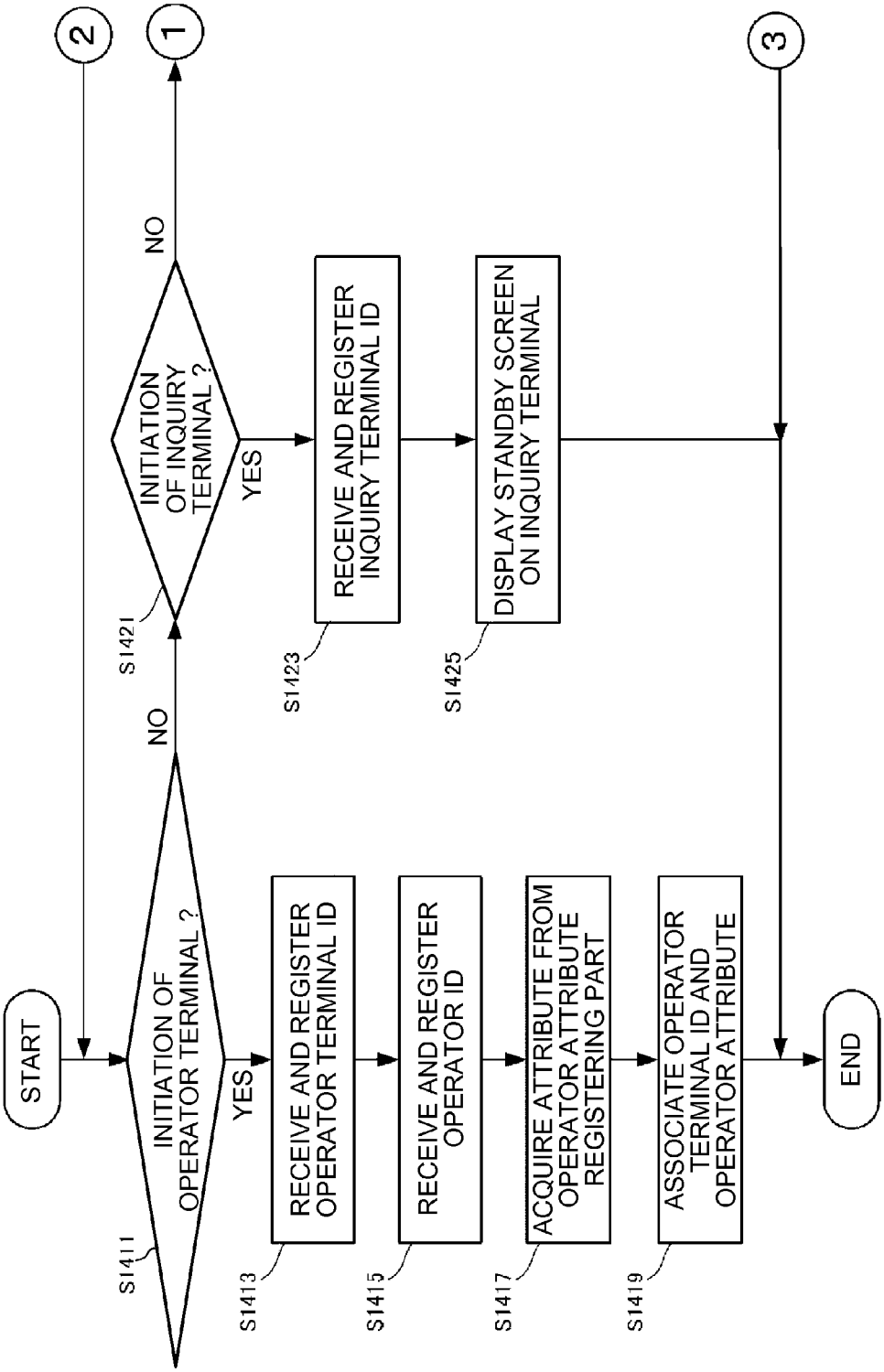

START
INITIATION OF OPERATOR TERMINAL ?
S1411
NO
YES
INITIATION OF INQUIRY TERMINAL ?
S1421
NO
YES
RECEIVE AND REGISTER OPERATOR TERMINAL ID
S1413
RECEIVE AND REGISTER OPERATOR ID
S1415
ACQUIRE ATTRIBUTE FROM OPERATOR ATTRIBUTE REGISTERING PART
S1417
ASSOCIATE OPERATOR TERMINAL ID AND OPERATOR ATTRIBUTE
S1419
RECEIVE AND REGISTER INQUIRY TERMINAL ID
S1423
DISPLAY STANDBY SCREEN ON INQUIRY TERMINAL
S1425
END
1
2
3

FIG. 14B

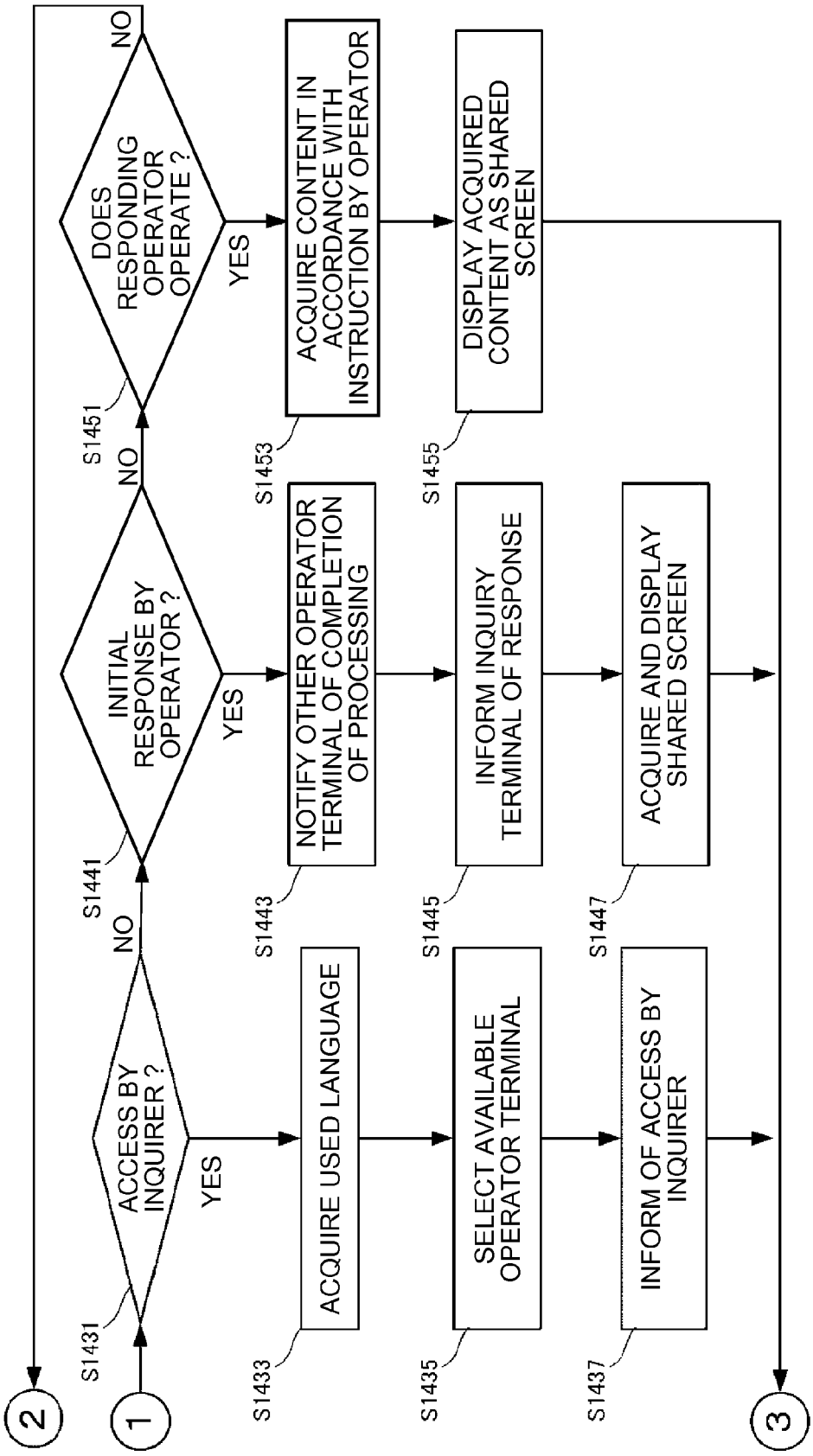

2
1
S1431
ACCESS BY INQUIRER ?
YES
NO
S1433
ACQUIRE USED LANGUAGE
S1435
SELECT AVAILABLE OPERATOR TERMINAL
S1437
INFORM OF ACCESS BY INQUIRER
S1441
INITIAL RESPONSE BY OPERATOR ?
YES
NO
S1443
NOTIFY OTHER OPERATOR TERMINAL OF COMPLETION OF PROCESSING
S1445
INFORM INQUIRY TERMINAL OF RESPONSE
S1447
ACQUIRE AND DISPLAY SHARED SCREEN
S1451
DOES RESPONDING OPERATOR OPERATE ?
YES
NO
S1453
ACQUIRE CONTENT IN ACCORDANCE WITH INSTRUCTION BY OPERATOR
S1455
DISPLAY ACQUIRED CONTENT AS SHARED SCREEN
3

FIG. 15

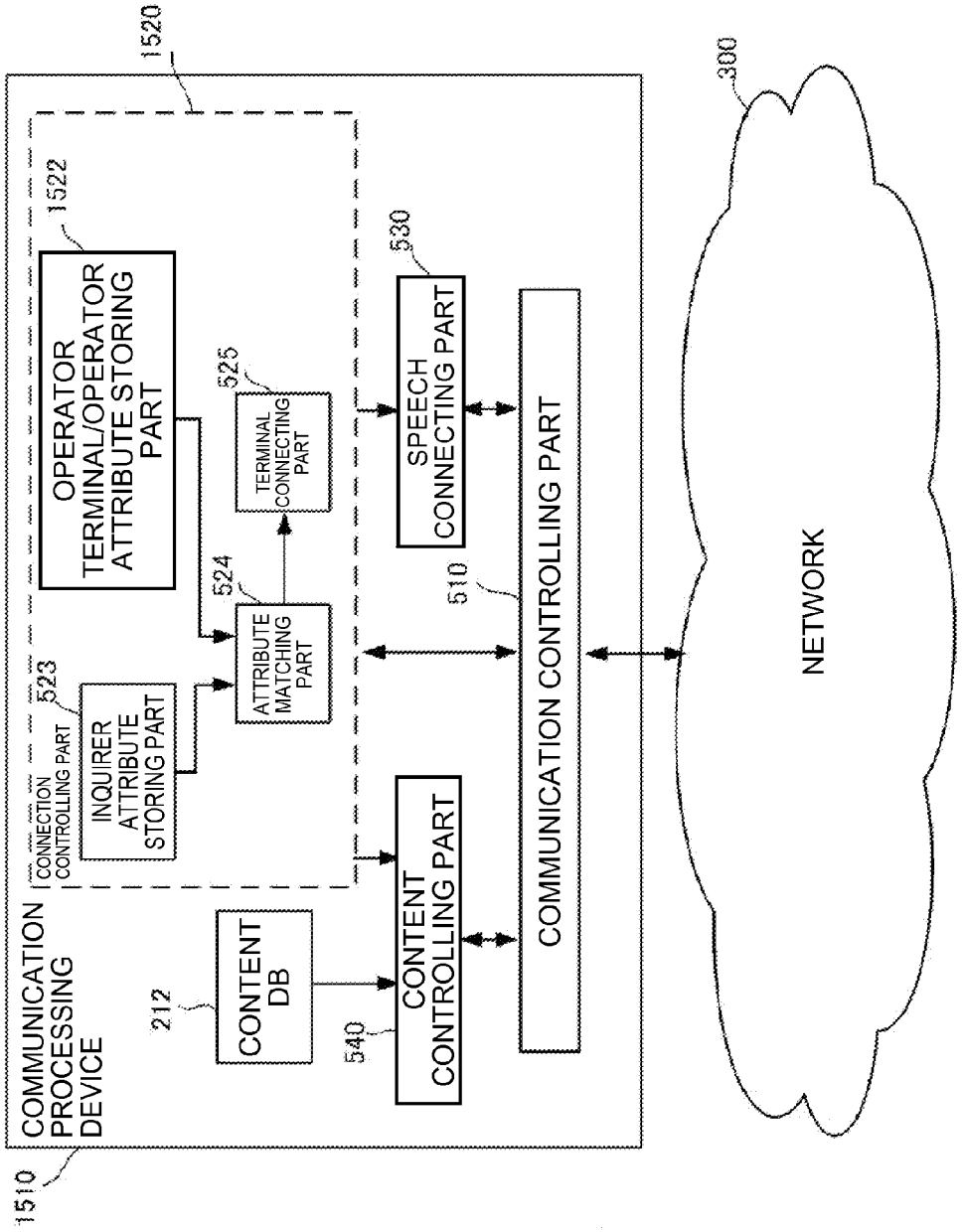

1510
COMMUNICATION PROCESSING DEVICE
1520
CONNECTION CONTROLLING PART
523
INQUIRER ATTRIBUTE STORING PART
1522
OPERATOR TERMINAL/OPERATOR ATTRIBUTE STORING PART
524
ATTRIBUTE MATCHING PART
525
TERMINAL CONNECTING PART
530
SPEECH CONNECTING PART
510
COMMUNICATION CONTROLLING PART
212
CONTENT DB
540
CONTENT CONTROLLING PART
300
NETWORK

FIG. 16

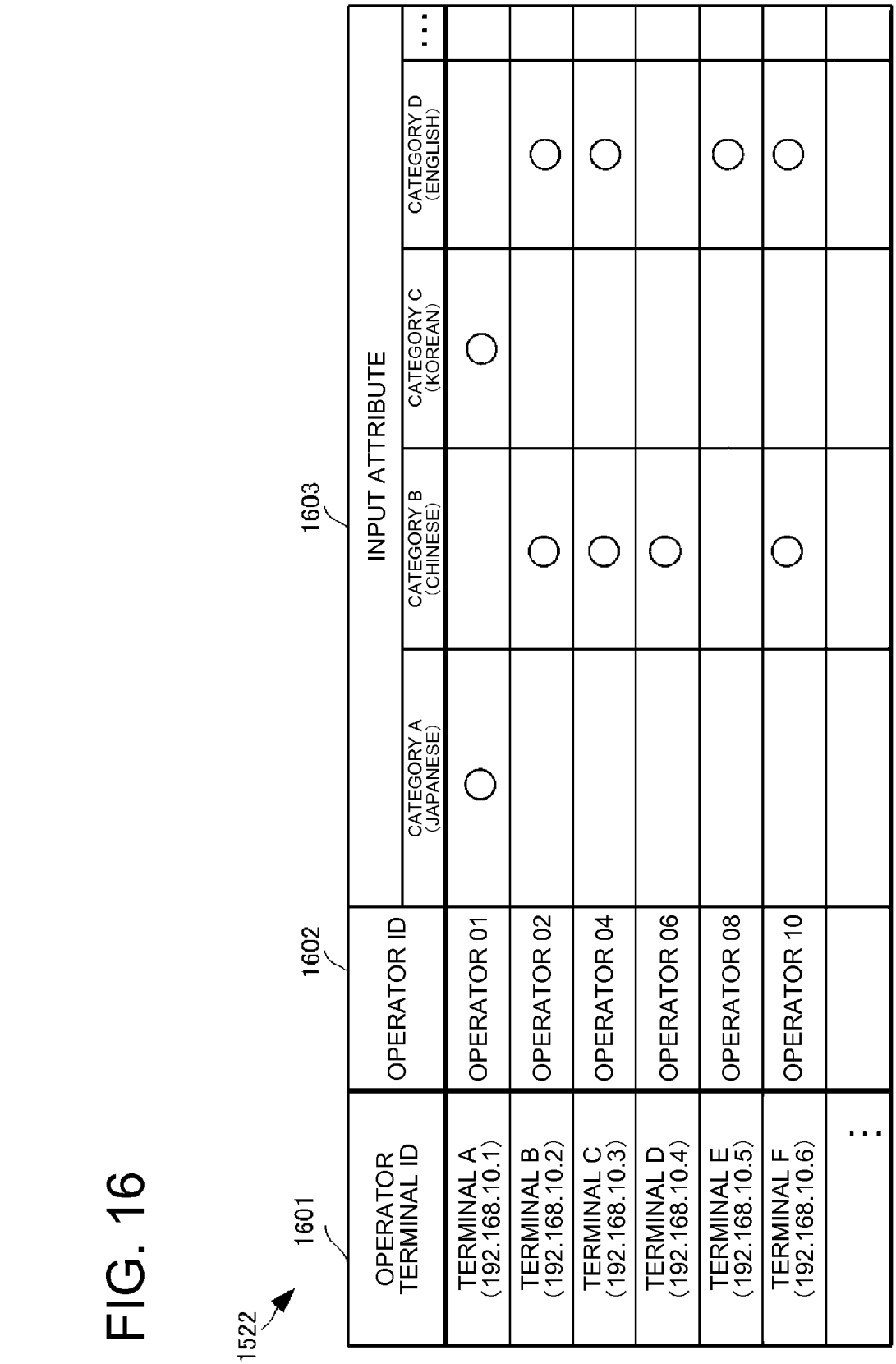

1522
1601
1602
1603
OPERATOR TERMINAL ID
OPERATOR ID
INPUT ATTRIBUTE
CATEGORY A (JAPANESE)
CATEGORY B (CHINESE)
CATEGORY C (KOREAN)
CATEGORY D (ENGLISH)
TERMINAL A (192.168.10.1)
OPERATOR 01
TERMINAL B (192.168.10.2)
OPERATOR 02
TERMINAL C (192.168.10.3)
OPERATOR 04
TERMINAL D (192.168.10.4)
OPERATOR 06
TERMINAL E (192.168.10.5)
OPERATOR 08
TERMINAL F (192.168.10.6)
OPERATOR 10

FIG. 17

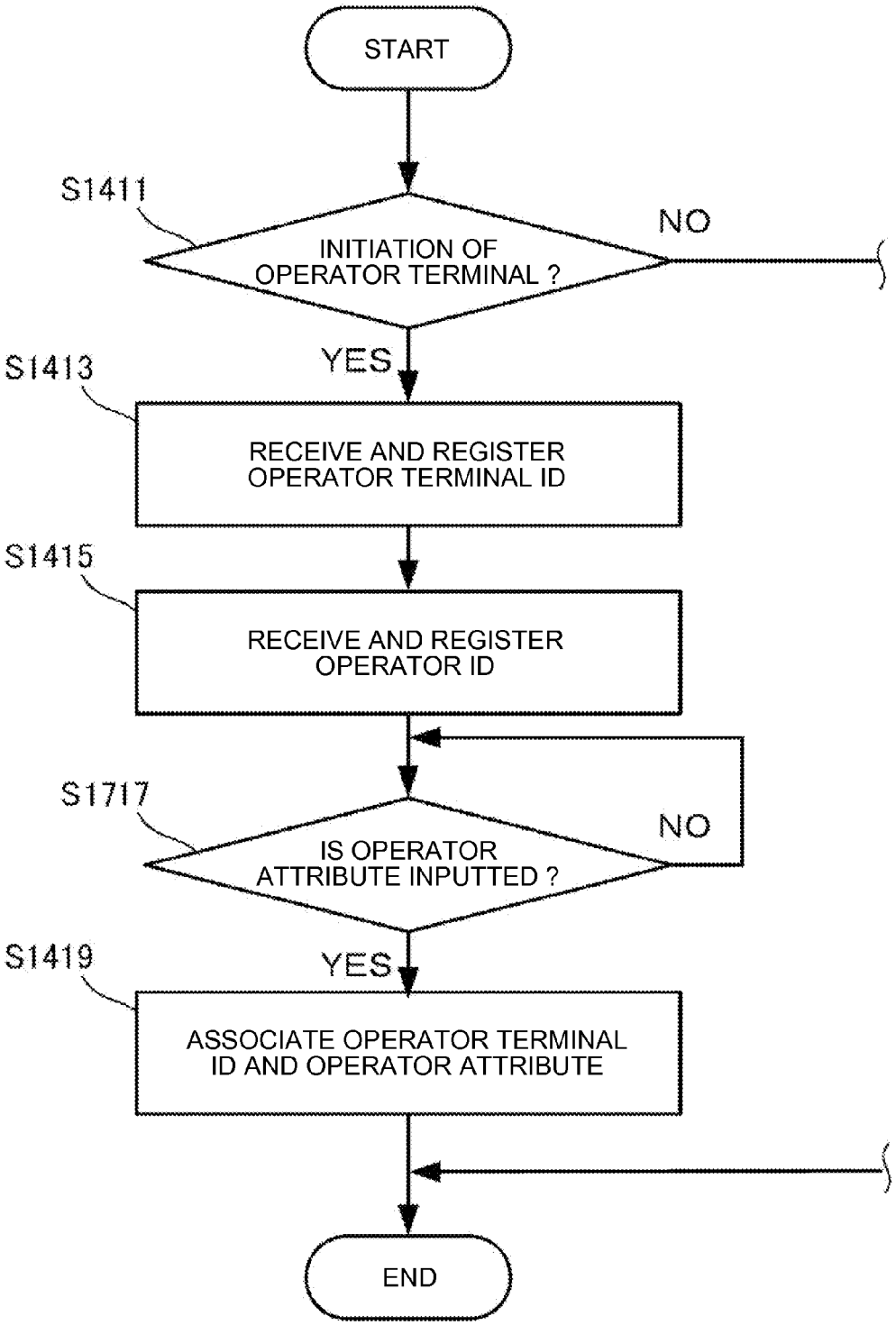

START
S1411
INITIATION OF OPERATOR TERMINAL ?
NO
YES
S1413
RECEIVE AND REGISTER OPERATOR TERMINAL ID
S1415
RECEIVE AND REGISTER OPERATOR ID
S1717
IS OPERATOR ATTRIBUTE INPUTTED ?
NO
YES
S1419
ASSOCIATE OPERATOR TERMINAL ID AND OPERATOR ATTRIBUTE
END

FIG. 18

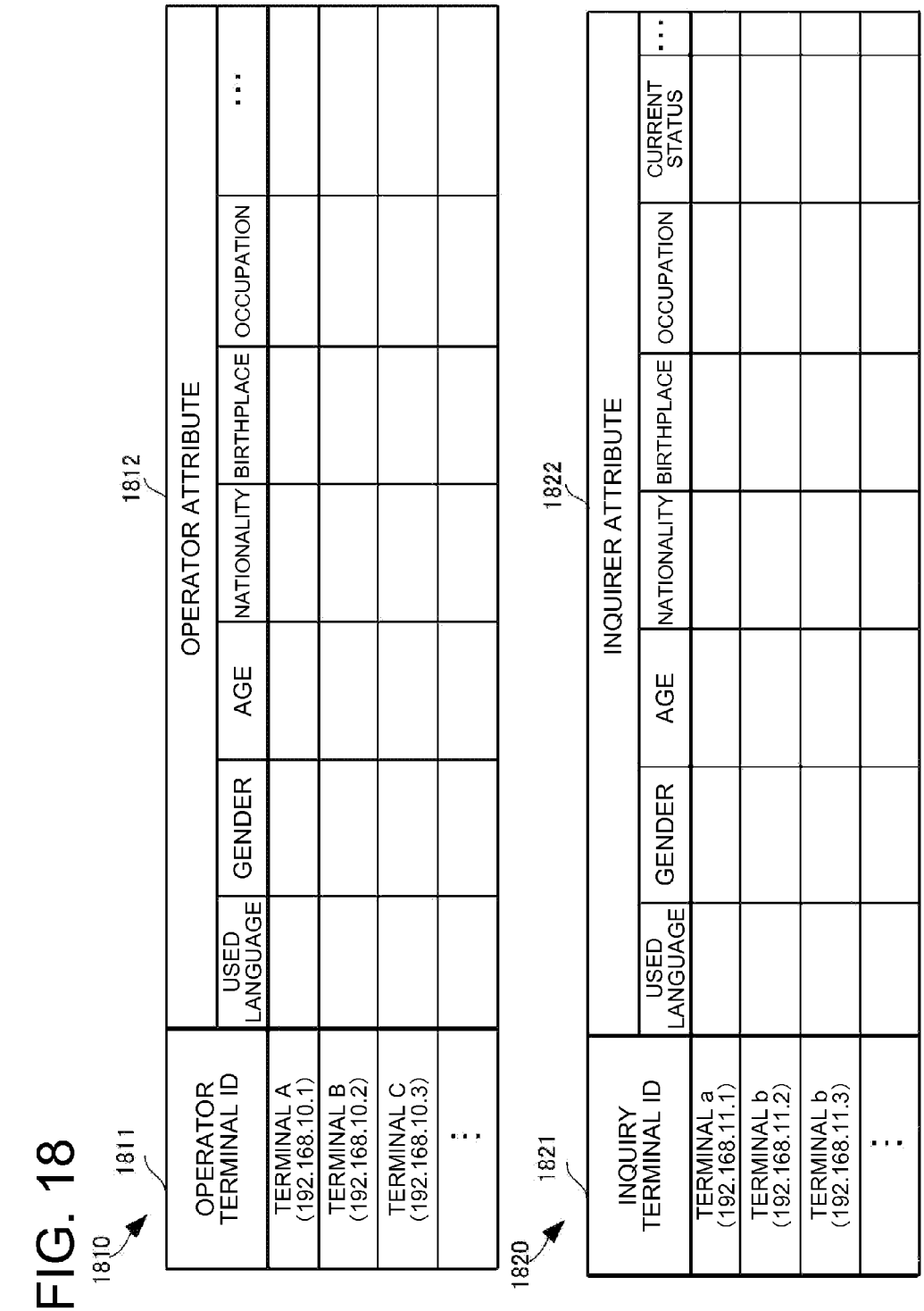

1810
1811
1812
OPERATOR TERMINAL ID
OPERATOR ATTRIBUTE
USED LANGUAGE
GENDER
AGE
NATIONALITY
BIRTHPLACE
OCCUPATION
...
TERMINAL A (192.168.10.1)
TERMINAL B (192.168.10.2)
TERMINAL C (192.168.10.3)
1820
1821
1822
INQUIRY TERMINAL ID
INQUIRER ATTRIBUTE
USED LANGUAGE
GENDER
AGE
NATIONALITY
BIRTHPLACE
OCCUPATION
CURRENT STATUS
...
TERMINAL a (192.168.11.1)
TERMINAL b (192.168.11.2)
TERMINAL b (192.168.11.3)

FIG. 19

1900

1901 OPERATOR ID	1902 NUMBER OF RECEPTIONS OF INQUIRIES TODAY	1903 TOTAL TIME OF RESPONSE TODAY
OPERATOR 01		
OPERATOR 02		
OPERATOR 03		
OPERATOR 04		
OPERATOR 05		
OPERATOR 06		
OPERATOR 07		
OPERATOR 08		
OPERATOR 09		
OPERATOR 10		

FIG. 20

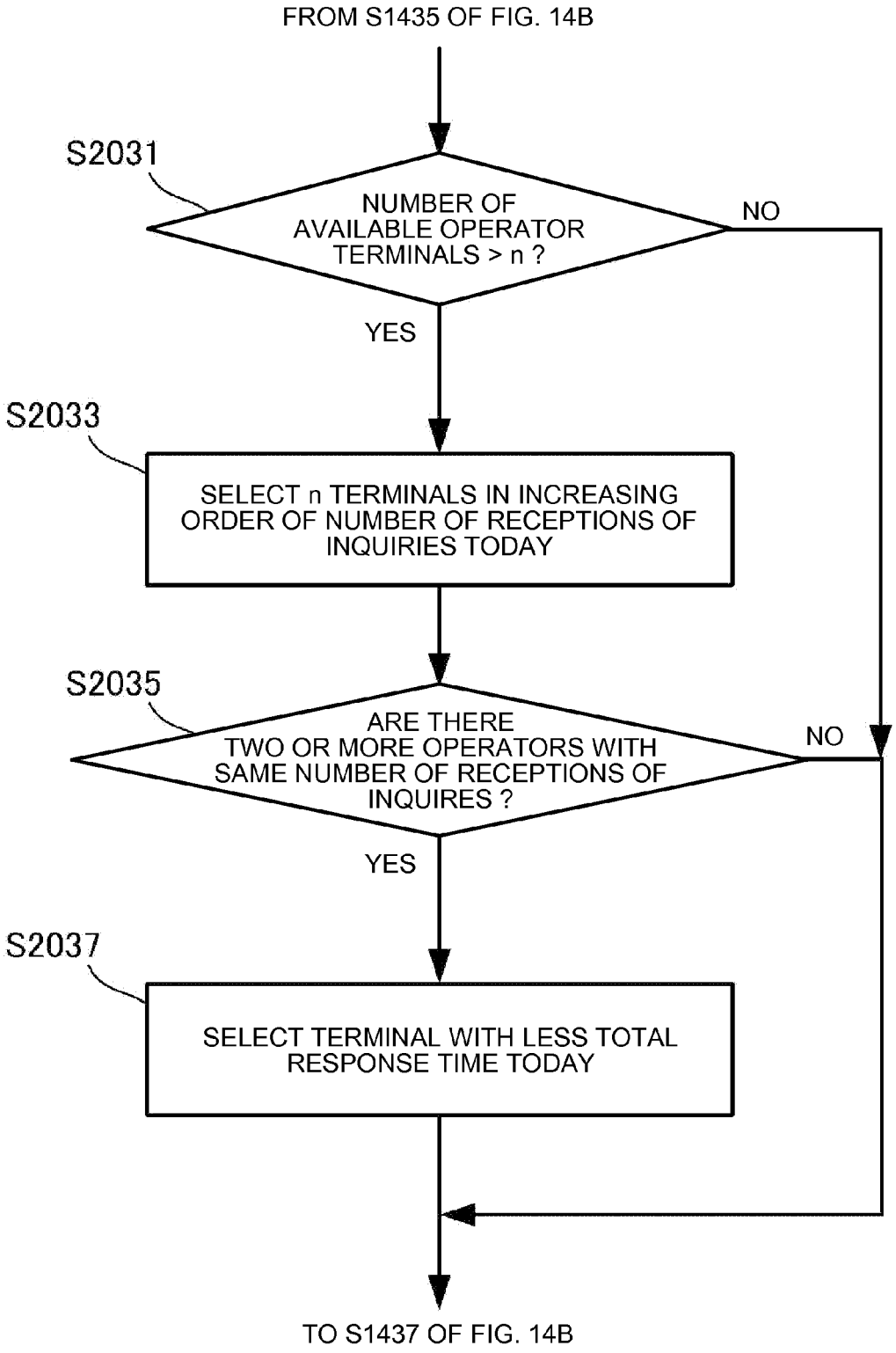
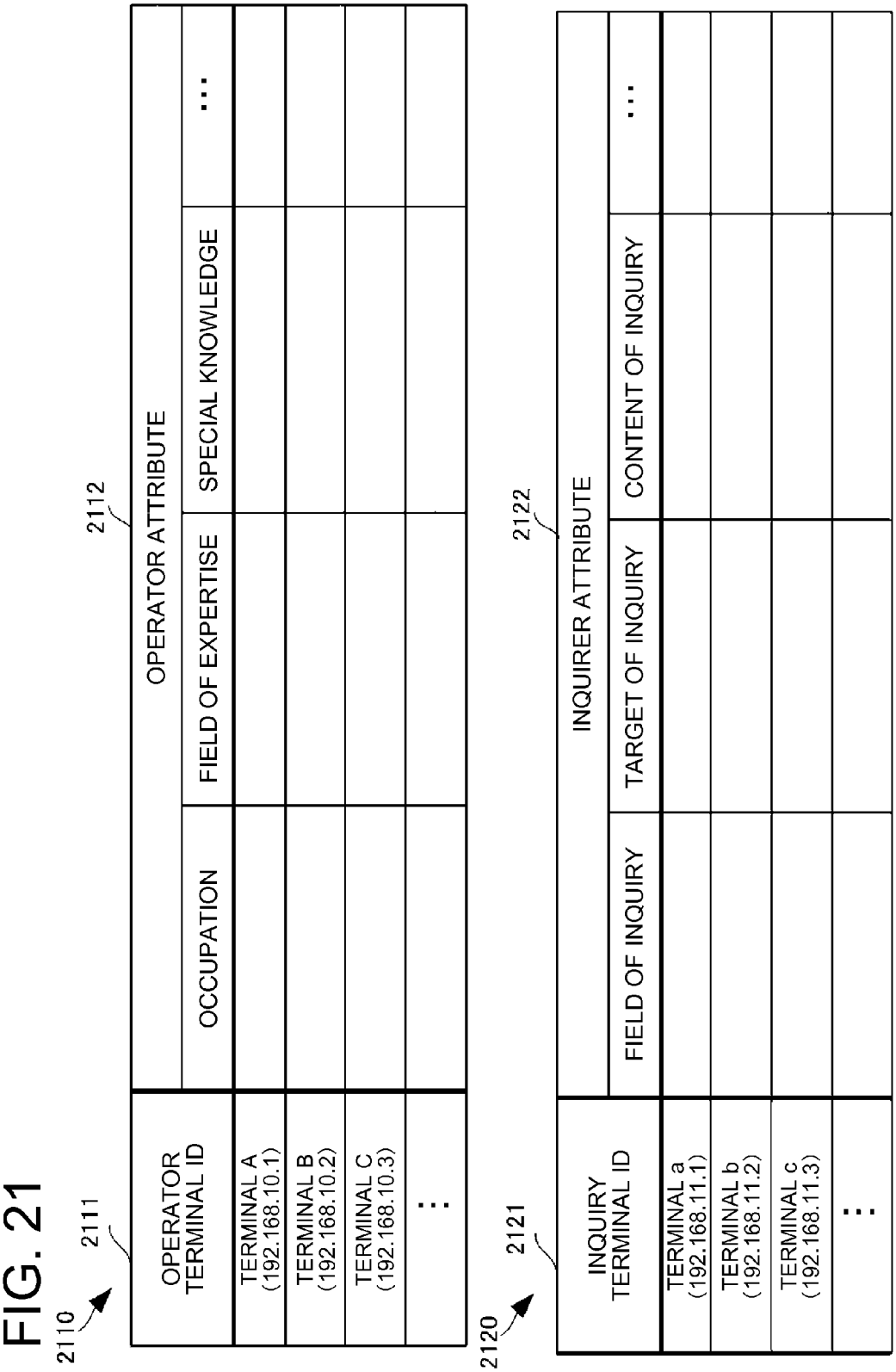

FROM S1435 OF FIG. 14B
S2031
NUMBER OF AVAILABLE OPERATOR TERMINALS > n ?
NO
YES
S2033
SELECT n TERMINALS IN INCREASING ORDER OF NUMBER OF RECEPTIONS OF INQUIRIES TODAY
S2035
ARE THERE TWO OR MORE OPERATORS WITH SAME NUMBER OF RECEPTIONS OF INQUIRES ?
NO
YES
S2037
SELECT TERMINAL WITH LESS TOTAL RESPONSE TIME TODAY
TO S1437 OF FIG. 14B

FIG. 21


2110
2111
2112
OPERATOR TERMINAL ID
OPERATOR ATTRIBUTE
OCCUPATION
FIELD OF EXPERTISE
SPECIAL KNOWLEDGE
...
TERMINAL A (192.168.10.1)
TERMINAL B (192.168.10.2)
TERMINAL C (192.168.10.3)
2120
2121
2122
INQUIRY TERMINAL ID
INQUIRER ATTRIBUTE
FIELD OF INQUIRY
TARGET OF INQUIRY
CONTENT OF INQUIRY
...
TERMINAL a (192.168.11.1)
TERMINAL b (192.168.11.2)
TERMINAL c (192.168.11.3)

COMMUNICATION PROCESSING SYSTEM, COMMUNICATION PROCESSING METHOD, COMMUNICATION PROCESSING DEVICE, AND CONTROL METHOD AND CONTROL PROGRAM OF COMMUNICATION PROCESSING DEVICE

TECHNICAL FIELD

[0001] The present invention relates to a communication technique for responding to inquiries by the general public via a network.

BACKGROUND ART

[0002] In the field of the abovementioned technique, a technique disclosed in Patent Document 1 is known. In this technique, for initiating a contact via a line, a caller transfers a media attribute value to a designated receiver, and the receiver notifies acceptance of a call corresponding to the received attribute value.

[0003] Patent Document 1: Japanese Unexamined Patent Application Publication No. H11-027347

[0004] However, in the abovementioned conventional technique, when a caller does not designate a receiver, it is impossible to select a receiver to accept a call based on the attribute of the caller. Moreover, when a responder (also referred to as an operator hereinafter) to receive changes and the attribute also changes, it is impossible to select a receiver to accept a call.

SUMMARY

[0005] An object of the present invention is to provide a technique to solve the abovementioned issues.

[0006] In order to achieve the abovementioned object, a communication processing system according to the present invention is a communication processing system including user communication terminals each operated by a user and responder communication terminals each operated by a responder responding to an inquiry from the user. The communication processing system includes:

[0007] a responder communication terminal information storing means for associating and storing each of the responder communication terminals and a responder attribute of the responder operating the responder communication terminal; and

[0008] a connection controlling means for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal.

[0009] In order to achieve the object, a communication processing method according to the present invention is a method for communication processing by a communication processing system including user communication terminals each operated by a user and responder communication terminals each operated by a responder responding to an inquiry from the user, and the communication processing system includes a responder communication terminal information storing means for associating and storing each of the responder communication terminals and a responder attribute of the responder operating the responder communication terminal.

[0010] The method includes controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal.

[0011] In order to achieve the object, a communication processing device according to the present invention includes:

[0012] a responder communication terminal information storing means for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user and a responder attribute of the responder operating the responder communication terminal; and

[0013] a connection controlling means for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

[0014] In order to achieve the object, a control method according to the present invention is a method for control by a communication processing device including a responder communication terminal information storing means for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user and a responder attribute of the responder operating the responder communication terminal.

[0015] The method includes controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

[0016] In order to achieve the object, a computer program according to the present invention includes instructions for causing a communication processing device, which includes a responder communication terminal information storing means for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user and a responder attribute of the responder operating the responder communication terminal, to realize a connection controlling means for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing means and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

[0017] According to the present invention, even if a responder as a receiver changes and the attribute also changes, it is possible to select a receiver to be called based on the attribute of an inquirer.

BRIEF DESCRIPTION OF DRAWINGS

[0018] FIG. **1** is a block diagram showing the configuration of a communication processing system according to a first exemplary embodiment of the present invention;

[0019] FIG. **2** is a diagram showing the outline of a communication processing system according to a second exemplary embodiment of the present invention;

[0020] FIG. **3** is a block diagram showing the configuration of the communication processing system according to the second exemplary embodiment of the present invention;

[0021] FIG. **4** is a block diagram showing the configuration of an inquiry terminal and an operator terminal according to the second exemplary embodiment of the present invention;

[0022] FIG. **5** is a block diagram showing the configuration of a communication processing system according to the second exemplary embodiment of the present invention;

[0023] FIG. **6**A is a diagram showing the configuration of an operator attribute storing part according to the second exemplary embodiment of the present invention;

[0024] FIG. **6**B is a diagram showing the configuration of operator terminal use information according to the second exemplary embodiment of the present invention;

[0025] FIG. **6**C is a diagram showing the configuration of an operator terminal/operator attribute storing part according to the second exemplary embodiment of the present invention;

[0026] FIG. **7** is a diagram showing the configuration of an inquirer attribute storing part according to the second exemplary embodiment of the present invention;

[0027] FIG. **8** is a diagram showing the configuration of content DB according to the second exemplary embodiment of the present invention;

[0028] FIG. **9** is a sequence diagram showing an operational procedure by the communication processing system according to the second exemplary embodiment of the present invention;

[0029] FIG. **10**A is a sequence diagram showing operational steps for initial setup by the inquiry terminal according to the second exemplary embodiment of the present invention;

[0030] FIG. **10**B is a sequence diagram showing operational steps for initial setup by the operator terminal according to the second exemplary embodiment of the present invention;

[0031] FIG. **11** is a sequence diagram showing operational steps for inquiry processing by the communication processing system according to the second exemplary embodiment of the present invention;

[0032] FIG. **12** is a block diagram showing the hardware configuration of the communication processing device according to the second exemplary embodiment of the present invention;

[0033] FIG. **13**A is a diagram showing a display screen of the inquiry terminal according to the second exemplary embodiment of the present invention;

[0034] FIG. **13**B is a diagram showing a display screen of the operator terminal according to the second exemplary embodiment of the present invention;

[0035] FIG. **14**A is a flowchart showing a processing procedure by the communication processing device according to the second exemplary embodiment of the present invention;

[0036] FIG. **14**B is a flowchart showing the processing procedure by the communication processing device according to the second exemplary embodiment of the present invention;

[0037] FIG. **15** is a block diagram showing the configuration of a communication processing device according to a third exemplary embodiment of the present invention;

[0038] FIG. **16** is a diagram showing the configuration of an operator terminal/operator attribute storing part according to the third exemplary embodiment of the present invention;

[0039] FIG. **17** is a flowchart showing a processing procedure by the communication processing device according to the third exemplary embodiment of the present invention;

[0040] FIG. **18** is a diagram showing the configurations of an operator terminal/operator attribute storing part and an inquirer attribute storing part according to a fourth exemplary embodiment of the present invention;

[0041] FIG. **19** is a diagram showing the configuration of information representing an operator processing status according to a fifth exemplary embodiment of the present invention;

[0042] FIG. **20** is a flowchart showing a processing procedure by a communication processing device according to the fifth exemplary embodiment of the present invention; and

[0043] FIG. **21** is a diagram showing the configurations of an operator terminal/operator attribute storing part and an inquirer attribute storing part according to a sixth exemplary embodiment of the present invention.

EXEMPLARY EMBODIMENTS

[0044] Referring to the drawings, exemplary embodiments of the present invention will be illustratively described below in detail. However, components described in the following exemplary embodiments are mere illustrations and are not for limiting the technical scope of the present invention.

First Exemplary Embodiment

[0045] A communication processing system **100** as a first exemplary embodiment of the present invention will be described referring to FIG. **1**. The communication processing system **100** is a system including a user communication terminal **101** operated by a user **102** and a responder communication terminal **103** operated by a responder **104** who responds to an inquiry from the user **102**.

[0046] As shown in FIG. **1**, the communication processing system **100**, which is the communication processing system **100** including the user communication terminal **101** operated by the user **102** and the responder communication terminal **103** operated by the responder **104** responding to an inquiry from the user **102**, includes: a responder communication terminal information storing part **120** that stores the responder communication terminals **103** and the attributes of the responders **104** operating the responder communication terminals **103** in association with each other; and a connection controlling part **140** that searches the attribute of the responder **104** corresponding to the attribute of the user **102** by referring to the responder communication terminal information storing part **120**, and controls to connect the responder communication terminal **103** associated with the attribute of the responder **104** and the user communication terminal **101**.

[0047] According to this exemplary embodiment, even if a responder to receive changes and the attribute of the responder **104** changes, it is possible to select the responder communication terminal **103** to be called based on the attribute of the user **102**.

Second Exemplary Embodiment

[0048] Next, a communication processing system according to a second exemplary embodiment of the present invention will be described. In this exemplary embodiment, when an inquirer (a user) inquires by using an inquiry terminal (a user communication terminal) placed in an airport, a language that the inquirer wants to speak for inquiry is notified as

the attribute of the inquirer. Then, a communication processing device refers to operator information registered in an operator terminal (a responder communication terminal), selects an operator terminal capable of responding in the notified language, and informs the operator terminal. Upon reception of assent to respond by the operator (responder) from the operator terminal, the communication processing device connects the inquirer with the operator, and causes to start an inquiry.

[0049] According to this exemplary embodiment, because an operator terminal registered by an operator capable of responding in a used language that is the attribute of an inquirer is informed of inquiry notification, communication does not become unavailable due to a difference of the language even if the operator changes. Thus, a proper connection between an inquirer and an operator can be realized without needless operation such as confirmation of used languages with each other.

<Outline of Communication Processing System of This Exemplary Embodiment>

[0050] FIG. **2** is a diagram showing the outline of a communication processing system **200** according to this exemplary embodiment. Although this exemplary embodiment describes an inquiry terminal as a terminal placed in an airport, a similar system for inquiry is also effectively employed in public facilities where many languages are used, such as a hotel. Moreover, the communication processing system **200** may be used in any use conditions, not only for an inquiry by an inquirer.

[0051] The communication processing system **200** is composed of three major portions as follows. One of them includes a plurality of inquiry terminals **220** to **240** each accepting an input of an inquiry content and outputting a response thereto. Another one of them includes a plurality of operator terminals **260** to **280** each accepting access by a responder (an operator) **290** corresponding to an inquiry and outputting the attribute of the operator, and also outputting an inquiry by an inquirer and accepting an input by an operator. The other of them is a communication processing device **210** connecting an inquirer and an operator in accordance with the attributes thereof.

[0052] The inquiry terminals **220** to **240** have display parts **221** to **241**, headsets **222** to **242**, and video cameras **223** to **243** for capturing images of inquirers, respectively. Also, the operator terminals **260** to **280** have display parts **261** to **281**, headsets **262** to **282**, and video cameras **263** to **283** for capturing images of inquirers, respectively. Instead of the headset, a microphone and a speaker may be separately provided. Alternatively, a speaker that produces a speech sound corresponding to an image displayed on the display part may be provided separately from the headset, which is used for a talk between an inquirer and an operator. For example, it is desirable that an instruction to operate a menu or the like is given through this speaker. Further, a microphone for operation instruction may be additionally provided. Besides, each of the display parts **221** to **241** has an inputting part (a user inputting means), such as a touchscreen panel, that accepts an input by an inquirer. Likewise, each of the display parts **261** to **281** has an inputting part (a responder inputting means), such as a touchscreen panel, that accepts an input by an operator. The inputting part is not limited to a touchscreen panel, and may additionally have a keyboard, a mouse and so on.

[0053] The communication processing device **210** includes a data server **211** for controlling display of images on the display parts and capture of images by the video cameras in the inquiry terminals and the operator terminals, and a speech server (PBX) **213** for controlling input and output of speech sounds of the headsets in the inquiry terminals and the operator terminals. Further, the communication processing device **210** has content database (abbreviated as DB, hereinafter) **212** serving as a content storing part storing content such as images, video images, speech sounds and letters provided to an inquirer and content that an inquirer and an operator should share information. Speech connection by the server (PBX) **213** is subjected to control **215** by the data server **211**, and a connection status is returned from the server (PBX) **213** for control of the data server **211**.

[0054] In FIG. **2**, a typical processing condition in the communication processing system **200** is shown by display screens of the display parts **221** to **241** and the display parts **261** to **281** and by a connection state between the data server **211** and the server (PBX) **213**.

[0055] In FIG. **2**, the inquiry terminal **220** used by an inquirer speaking Japanese is connected with the operator terminal **270** that an operator capable of speaking Japanese has registered and agreed to respond. Moreover, the inquiry terminal **230** used by an inquirer speaking English is connected with the operator terminal **280** that an operator capable of speaking English has registered and agreed to respond. Moreover, the inquiry terminal **240** used by an inquirer speaking Chinese is connected with the operator terminal **260** that an operator capable of speaking Chinese has registered and agreed to respond. The used languages are displayed on the display screens, respectively, and communication is performed with ease. FIG. **2** shows a case where each language corresponds to one terminal. However, the feature of this exemplary embodiment is that, in a case where operators capable of speaking a certain language are registered to a plurality of operator terminals, a used language is notified by an inquirer to the operator terminals and connection is established based on agreement by any one of the operators.

[0056] With this configuration, an inquirer can smoothly start communication in his/her language without any operation. On the other hand, an operator can recognize without any operation that the inquirer is requesting communication in a language that the operator can speak. Thus, the operator does not need to change with another operator capable of speaking the language used by the inquirer, and consequently, can accept an inquiry with efficiency without keeping the inquirer wait. Also in a case where an operator is a multilingual person who can speak a plurality of languages, the operator can know without any operation what language an inquirer wants to communicate in among the languages that the operator can speak.

<Configuration of Communication Processing System>

[0057] FIG. **3** is a block diagram showing the configuration of the communication processing system **200** according to this exemplary embodiment.

[0058] The communication processing system **200** has the inquiry terminals **220** to **240** each used by an inquirer **250**, the operator terminals **260** to **280** each used by an operator **290**, and the communication processing device **210** controlling connection between the inquiry terminals and the operator terminals. Below, the functional configurations of the respective structural elements will be described.

(Configurations of Inquiry Terminal and Operator Terminal)

[0059] FIG. **4** is a block diagram showing the configurations of the inquiry terminal **220** and the operator terminal **260** according to this exemplary embodiment. The inquiry terminal **220** and the operator terminal **260** will be described as the representatives because the inquiry terminals **230**, **240** and the operator terminals **270**, **280** have the same configurations.

[0060] A common terminal controlling part **400** has a communication controlling part **410** controlling communication performed via a network **300**. Information communicated by the communication controlling part **410** is divided into data and a speech sound. A data controlling part **420** performs control such as encoding and decoding of the data. A screen controlling part **430** generates screen data based on the data passed from the data controlling part **420** and displays on the display part **221**/**261**. Moreover, the screen controlling part **430** sends instruction data to the data controlling part **420** based on an instruction passed from the display part **221**/**261**. On the other hand, a speech controlling part **440** performs control such as compression of speech. A transmitting/receiving part **450** converts the speech passed from the speech controlling part **440** into reproduced signals, and outputs a speech sound through the headset **222**/**262**. Moreover, the transmitting/receiving part **450** transmits speech data to the speech controlling part **440** based on speech input through the microphone of the headset **222**/**262**. The terminal controlling part **400** can be realized by a versatile computer, for example, a personal computer.

[0061] The display part **221**/**261**, the headset **222**/**262**, and the video camera **223**/**263** are the same as shown in FIG. **2**.

(Configuration of Communication Processing Device)

[0062] FIG. **5** is a block diagram showing the configuration of the communication processing device **210** according to this exemplary embodiment.

[0063] The communication processing device **210** has a communication controlling part **510** controlling communication performed via the network **300**. Information communicated by the communication controlling part **510** is divided into data and a speech sound. A content controlling part **540** performs control such as encoding of data passed from the content DB **212**. On the other hand, a speech connecting part **530** controls speech connection between the inquiry terminals and the operator terminals.

[0064] A connection controlling part **520** controls data connection and speech connection between the inquiry terminal and the operator terminal, based on a language used by an inquirer inputted as the attribute of the inquirer through the inquiry terminal and a language used by an operator (a usable language) registered as the attribute of the operator through the operator terminal. The connection controlling part **520** has the following functional configuration parts. An operator attribute storing part **521** previously stores, for each person working as an operator of the communication processing system **200**, a language that the person can speak as the attribute of the person. An operator terminal/operator attribute storing part **522**, when an operator registered in the operator attribute storing part **521** starts using any of the operator terminals, stores the attribute of the operator in association with the operator terminal. An inquirer attribute storing part **523** stores a language used for an inquiry inputted by an inquirer through any of the inquiry terminals, in association with the inquiry terminal.

[0065] An attribute matching part **524** searches operator terminals used (operated) by operators capable of using a language coincident with (corresponding to) the language used by the inquirer stored in the inquirer attribute storing part **523**, from the operator terminal/operator attribute storing part **522**. A terminal connecting part **525** informs the operator terminals used by the operators capable of using the language coincident with the language used by the inquirer that an inquiry is made, based on the result of search by the attribute matching part **524**. Upon receiving agreement to respond to the inquiry from any of the informed operator terminals, the terminal connecting part **525** connects the operator terminal to the inquiry terminal used by the inquirer.

[0066] The communication processing device **210** can be realized by a versatile computer, for example, a personal computer.

(Operator Attribute Storing Part)

[0067] FIG. **6**A is a diagram showing the configuration of the operator attribute storing part **521** according to this exemplary embodiment.

[0068] The operator attribute storing part **521** stores the kinds of languages, Japanese **612**, Chinese **613**, Korean **614** and English **615**, that the respective operators can use for conversation, in association with operator identifiers (abbreviated as ID, hereinafter) **611**. FIG. **6**A shows a language that an operator can use with a white circle. FIG. **6**A shows the four languages, but languages are not limited to them. Moreover, a region to store an operator terminal ID **620** when an operator uses the operator terminal is prepared.

(Operator Terminal Use Information)

[0069] FIG. **6**B is a diagram showing the configuration of operator terminal use information **600** according to this exemplary embodiment.

[0070] The operator terminal use information **600** is information showing an operator ID **622** using an operator terminal and an operator terminal use condition **623**, in association with an operator terminal ID **621** of the operator terminal. The operator terminal use information **600** is stored, for example, in the operator terminal/operator attribute storing part **522** to be described later referring to FIG. **6**C, or in another storing part (not shown in the drawings). The operator terminal use condition **623** includes "responding" (using), "connectable" (operator standby) and "vacant" (operator absent), but is not limited thereto. Moreover, the operator terminal ID **621** may include an IP (Internet Protocol) address.

(Operator Terminal/Operator Attribute Storing Part)

[0071] FIG. **6**C is a diagram showing the configuration of the operator terminal/operator attribute storing part **522** according to this exemplary embodiment.

[0072] The operator terminal/operator attribute storing part **522** is equivalent to the operator attribute storing part **521** shown in FIG. **6**A with a used operator terminal ID **630** stored. The used operator terminal ID (including an IP address) **630** is stored based on the operator terminal use information **600** shown in FIG. **6**B. The configuration of the operator terminal/operator attribute storing part **522** is not limited to the configuration shown in FIG. **6**C, and may be any

configuration that stores the operator ID **611** and a used language in association with the operator terminal ID **630**.

(Inquirer Attribute Storing Part)

[0073] FIG. **7** is a diagram showing the configuration of the inquirer attribute storing part **523** according to this exemplary embodiment.

[0074] The inquirer attribute storing part **523** stores a used language **702** as the attribute of an inquirer in association with an inquiry terminal ID **701**. The inquirer attribute storing part **523** may further store another attribute **703** (e.g., the gender and age of an inquirer, which will be described later).

(Content DB)

[0075] FIG. **8** is a diagram showing the configuration of the content DB **212** according to this exemplary embodiment.

[0076] The content DB **212** stores a content ID **804** including a used language in association with a used language **801**, an inquiry content **802** and an inquiry target **803**. For example, in a case where the used language **801** is Japanese, the inquiry content **802** is an inquiry about sightseeing outside the airport, and the inquiry target **803** is sightseeing in the city, content with the content ID **804** "JP21" (Japanese 21) is used for information. Moreover, in a case where the used language **801** is English, the inquiry content **802** is an inquiry about a destination in the airport, and the inquiry target **803** is the boarding gate, content with the content ID **804** "EG11" (English 11) is used for information. The classification of the used language **801**, the inquiry content **802** and the inquiry target **803** is not limited to this example. It is possible to classify in a different way depending on inquiries. Moreover, instead of management of information on a content basis, selection of content, images, speech sounds, letters or the like by keywords may be performed. For example, in response to an inquiry about information in the airport, an operator may select and display an image of a map of the inside of the airport.

<Operational Procedure by Communication Processing System>

[0077] FIG. **9** is a sequence diagram showing an operational procedure **900** by the communication processing system according to this exemplary embodiment. FIG. **9** shows the outline of the whole operational procedure, and the details will be described referring to FIGS. **10**A, **10**B and **11**. Referring to FIG. **9**, the inquiry terminal **240** will be described as the representative.

[0078] First, initial setup is performed. In the initial setup, the inquiry terminal **240** is powered on and brought to standby (display of an initial screen) in step S**901**. On the other hand, in step **903**, the respective operators select the operator terminals **260** to **280**, and usable languages as available attributes are thereby linked to the operator terminals. FIG. **9** shows a case where an operator who can speak Chinese is in charge of the operator terminal **260**, an operator who can speak English is in charge of the operator terminal **270**, and an operator who can speak Chinese is in charge of the operator terminal **280**. In this exemplary embodiment, the available languages are not inputted from the operator terminals. The available languages of the operators are previously associated with the operator IDs and stored in the operator attribute storing part **521**. When the operator ID is inputted, the available language of the operator is automatically acquired in the communication processing device **210**. After completion of the initial setup, access by an inquirer is waited. All of the operator terminals do not need to be used by the operators. An operator terminal without an operator is excluded from control by the system.

[0079] When the inquirer **250** inputs an attribute (a used language) when starting an inquiry, the inquiry terminal **240** transmits the inputted attribute (herein, Chinese) to the communication processing device **210** in step S**911**. The communication processing device **210** determines that operators who can speak Chinese are in charge of the operator terminals **260** and **280**, and informs the operator terminals **260** and **280** that an inquirer who wants to inquire in Chinese is accessing in step S**913**.

[0080] FIG. **9** shows a case where the operator **290** of the operator terminal **280** agrees to respond. In step S**915**, the operator terminal **280** returns a signal corresponding to a request for response to the communication processing device **210**. Because the inquiry is accepted, the communication processing device **210** notifies the other informed operator terminal **260** that the inquiry is already processed (or the inquiry is accepted by the one operator terminal) in step S**917**. Then, in step S**919**, the communication processing device **210** sends a request for connection to the inquiry terminal **240** and the operator terminal **280**. In step S**921**, the inquiry terminal **240** and the operator terminal **280** are connected. Speech connection is directly performed by the server (PBX) **213**, whereby it becomes possible to talk by using the headset. Data is displayed by the data server **211**, for example, in the form of a common screen.

(Initial Setup of Inquiry Terminal)

[0081] FIG. **10**A is a sequence diagram showing the operational step S**901** in the initial setup of the inquiry terminals **220** to **240** according to this exemplary embodiment. The operational step shown in FIG. **10**A is an example, and all steps shown in FIG. **10**A do not need to be executed in step S**901** shown in FIG. **9** at all times.

[0082] When the inquiry terminals **220** to **240** are powered on, the speech controlling part **440** of each of the inquiry terminals **220** to **240** transmits a terminal registration request to the speech connecting part **530** of the communication processing device **210** in step S**1001**. In the communication processing device **210**, the speech connecting part **530** sends a terminal registration request to the connection controlling part **520** in step S**1003**. Upon finishing registration of the inquiry terminal by the connection controlling part **520**, the connection controlling part **520** notifies the speech connecting part **530** that terminal registration is completed in step S**1005**. The speech connecting part **530** notifies the speech controlling part **440** of each of the inquiry terminals **220** to **240** that terminal registration is completed in step S**1007**.

[0083] In step S**1009**, the speech controlling part **440** of each of the inquiry terminals **220** to **240** notifies the data controlling part **420** that the terminal registration process by the speech controlling part **440** is completed. In step S**1011**, the data controlling part **420** requests the content controlling part **540** of the communication processing device **210** to transmit initial content (including an initial screen). The content controlling part **540** of the communication processing device **210** retrieves initial content from the content DB **212** and, in step S**1013**, transmits to the data controlling part **420** of each of the inquiry terminals **220** to **240**. The data controlling part **420** causes each of the display parts **221** to **241** of the

inquiry terminals **220** to **240** to display the initial screen (see FIG. **13**A) of the initial content, and waits for access by the inquirers.

(Initial Setup of Operator Terminal)

[0084] FIG. **10**B is a sequence diagram showing the operational step S**903** in the initial setup of the operator terminals **260** to **280** according to this exemplary embodiment. The operational step shown in FIG. **10**B is an example and, in S**903** shown in FIG. **9**, all steps shown in FIG. **10**B do not need to be executed at all times.

[0085] When the operator terminals **260** to **280** are powered on, the speech controlling part **440** of each of the operator terminals **260** to **280** transmits a terminal registration request to the speech connecting part **530** of the communication processing device **210** in step S**1021**. In the communication processing device **210**, the speech connecting part **530** sends a terminal registration request to the connection controlling part **520** in step S**1023**. Upon finishing registration of the operator terminal by the connection controlling part **520**, the connection controlling part **520** notifies the speech connecting part **530** that terminal registration is completed in step S**1025**. The speech connecting part **530** notifies the speech controlling part **440** of each of the operator terminals **260** to **280** that operator registration is completed in step S**1027**.

[0086] In step S**1029**, the speech controlling part **440** of each of the operator terminals **260** to **280** notifies completion of the terminal registration process by the speech controlling part **440** (speech completion) to the data controlling part **420**. In step S**1031**, the data controlling part **420** requests the content controlling part **540** of the communication processing device **210** to transmit authentication content for operator authentication. The content controlling part **540** of the communication processing device **210** retrieves authentication content from the content DB **212** and, in step S**1033**, transmits to the data controlling part **420** of each of the operator terminals **260** to **280**. The data controlling part **420** causes each of the display parts **261** to **281** of the operator terminals **260** to **280** to display an authentication screen (not shown in the drawings) for the authentication content, and stands by for input of authentication information by the operators. Input by the operators may be accepted through a touchscreen panel (a responder inputting means) of each of the display parts **261** to **281**, or may be accepted through an inputting means like a keyboard (not shown in the drawings). Authentication information includes an operator ID for identifying an operator and, if necessary, a password. In this exemplary embodiment, this operator ID is used in the communication processing device **210** as information for associating a second communication terminal (an operator terminal) and the attribute of a responder using the second communication terminal. Besides, authentication information may include the attribute of a responder.

[0087] When authentication information from the operator terminals **260** to **280** is inputted, the data controlling part **420** of each of the operator terminals **260** to **280** transmits operator authentication information to the content controlling part **540** of the communication processing device **210** in step S**1035**. In the communication processing device **210**, the content controlling part **540** sends the operator authentication information to the connection controlling part **520** in step S**1037**. Upon finishing registration of the operator by the connection controlling part **520**, the connection controlling part **520** notifies the content controlling part **540** that operator authentication is completed t in step S**1039**. In step S**1041**, the content controlling part **540** notifies operator authentication completion (operator registration completion) to the data controlling part **420** of each of the operator terminals **260** to **280**.

[0088] In step S**1043**, the data controlling part **420** of each of the operator terminals **260** to **280** requests standby content including standby display to the content controlling part **540** of the communication processing device **210**. The content controlling part **540** of the communication processing device **210** retrieves standby content from the content DB **212** and, in step S**1045**, transmits to the data controlling part **420** of each of the operator terminals **260** to **280**. The data controlling part **420** causes the display part to display a standby screen of the standby content.

(Inquiry Processing)

[0089] FIG. **11** is a sequence diagram showing the operational steps S**911** to S**921** for inquiry processing in the communication processing system **200** according to this exemplary embodiment. The operational steps shown in FIG. **11** are an example and, in steps S**911** to S**921** shown in FIG. **9**, all of the steps shown in FIG. **11** do not need to be executed at all times. The operational steps may be shown by a simplified sequence like S**911** to S**921** shown in FIG. **9**.

[0090] When an inquirer selects a category (a used language) on the screen of any of the inquiry terminals **220** to **240**, the screen controlling part **430** of the inquiry terminal transmits the used language of the inquirer to the content controlling part **540** of the communication processing device **210** in step S**1101**. In step S**1103**, the content controlling part **540** returns a report of reception of the used language of the inquirer. Next, when the inquirer instructs to start an inquiry on the screen, the screen controlling part **430** transmits a notice of start of an inquiry to the content controlling part **540** of the communication processing device **210** in step S**1105**. In step S**1107**, the content controlling part of the communication processing device **210** passes the used language of the inquirer to the connection controlling part **520**.

[0091] The connection controlling part **520** of the communication processing device **210** executes matching between useable languages of operators in charge of the operator terminals **260** to **280** and the inquirer's used language passed by the content controlling part **540**. The connection controlling part **520** instructs the content controlling part **540** to transmit a start noticing screen to the operator terminal that the usable language matches the used language in step S**1109**, and instructs the speech connecting part **530** to produce a speech sound in step S**1113**. In this exemplary embodiment, because the inquirer speaks in Chinese and operators capable of speaking Chinese are in charge of the operator terminals **260** and **280** (see FIG. **9**), the communication processing device **210** (the content controlling part **540** and the speech connecting part **530**) transmits an inquiry noticing screen and a speech sound to the operator terminals **260** and **280**. Either the noticing screen or the speech sound is not transmitted to the operator terminal **270** because the operator of the operator terminal **270** speaks English.

[0092] In step S**1111**, the content controlling part **540** transmits the start noticing screen to the screen controlling part **430** of the inquiry terminal accessed by the inquirer, and also transmits the inquiry noticing screen to the operator terminals **260** and **280** (see FIG. **13**B). Moreover, in step S**1115**, the speech connecting part **530** transmits the speech sound to the

transmitting/receiving part **450** of the inquiry terminal accessed by the inquirer, and also transmits the speech sound to the operator terminals **260** and **280**. The noticing screen may display the content of an inquiry in a used language, or may show in a used language only that there is an inquiry.

[0093] In the example described referring to FIGS. **9** and **11**, it is assumed that the operator of the operator terminal **280** agrees to respond to the inquiry. The screen controlling part **430** of the operator terminal **280** transmits agreement to respond to the content controlling part **540** of the communication processing device **210** in step S**1117**. In step S**1119**, the content controlling part **540** notifies the connection controlling part **520** that the operator terminal **280** agrees to respond to the inquiry. In step S**1121**, the connection controlling part **520** instructs the speech connecting part **530** to establish a speech connection between the inquiry terminal accessed by the inquirer and the operator terminal **280**. Moreover, in step S**1127**, the connection controlling part **520** instructs the content controlling part **540** to establish a screen connection between the inquiry terminal accessed by the inquirer and the operator terminal **280**. In step S**1123**, the speech connecting part **530** instructs the transmitting/receiving part **450** of the inquiry terminal accessed by the inquirer and the transmitting/receiving part **450** of the operator terminal **280** to establish a speech connection. Moreover, in step S**1131**, the content controlling part **540** instructs the screen controlling part **430** of the inquiry terminal accessed by the inquirer and the screen controlling part **430** of the operator terminal **280** to establish a screen connection. In step S**1125**, the transmitting/receiving part **450** of the inquiry terminal accessed by the inquirer and the transmitting/receiving part **450** of the operator terminal **280** are connected by the server (PBX) **213**, whereby a talk is allowed. On the other hand, in step S**1133**, the screen controlling part **430** of the inquiry terminal accessed by the inquirer and the screen controlling part **430** of the operator terminal **280** are connected to the content controlling part **540** by the data server **211**, whereby share of a display screen for the same content is allowed.

[0094] In steps S**1109** to S**1115** and steps S**1121** to S**1133**, speech sounds and images may be processed simultaneously, may be processed in the order shown in FIG. **11**, or may be processed in the opposite order. It is desirable that speech sounds and images are simultaneously processed because the respective processes are executed by functional configuration parts independent of each other.

<Hardware Configuration of Communication Processing Device>

[0095] FIG. **12** is a block diagram showing the hardware configuration of the communication processing device **210** according to this exemplary embodiment.

[0096] In FIG. **12**, a CPU **1210** is a processor for calculation and control, and realizes the respective functional configuration parts shown in FIG. **2** by execution of a program. A ROM **1220** stores fixed data and a program, for example, initial data and a program. A program may be stored in a computer-readable recording medium, instead of the ROM **1220**. For example, the recording medium is a portable medium such as a flexible disk, an optical disk, a magneto-optical disk, and a semiconductor memory. The communication controlling part **510** communicates with the inquiry terminals **220** to **240** and the operator terminals **260** to **280** via the network **300**. Communication may be wireless or wired.

[0097] A RAM **1240** is a random access memory used by the CPU **1210** as a work area for temporary storage. In the RAM **1240**, a region for storing data necessary for realization of this exemplary embodiment is secured. Reference numeral **1241** denotes an ID of a currently connected inquiry terminal. Reference numeral **1242** denotes an inquirer's attribute (a used language) selected and inputted from the inquiry terminal with the inquiry terminal ID **1241**. Reference numeral **1243** denotes an ID of a currently connected operator terminal. Reference numeral **1244** denotes an attribute (a usable language) of an operator using the operator terminal with the operator terminal ID **1243**. Reference numeral **1245** denotes an ID of an operator terminal used by an operator whose attribute matches the inquirer's attribute as a result of matching between the inquirers's used language and usable languages of operators using operator terminals. The number of the operator terminal IDs **1245** can be one or more. Reference numeral **1246** denotes an ID of an operator terminal used by an operator corresponding to the inquiry by the inquirer among the operator terminals with the operator terminal IDs **1245**. Reference numeral **1247** denotes a display screen on the inquiry terminal (e.g., see FIG. **13**A). Reference numeral **1248** denotes a display screen on the operator terminal (e.g., see FIG. **13**B). Reference numeral **1249** denotes a content ID designating the content of an initial screen and an operation screen on the inquiry terminal and the operator terminal, or a content ID instructing the content to be displayed as a shared screen on the inquiry terminal and the operator terminal.

[0098] Storage **1250** stores database and various kinds of parameters, and also stores the following data and programs necessary for realization of this exemplary embodiment. Reference numeral **521** denotes the operator attribute storing part **521** shown in FIGS. **5** and **6**A. Reference numeral **522** denotes the operator terminal/operator attribute storing part shown in FIGS. **5** and **6**C. Reference numeral **523** denotes the inquirer attribute storing part **523** shown in FIGS. **5** and **7**. Reference numeral **212** denotes the content DB shown in FIGS. **2**, **5** and **8**. The storage **1250** stores the following programs. Reference numeral **1251** denotes a communication processing program causing to execute the entire processing. Reference numeral **1252** denotes an operator attribute management module for managing the attributes of operators. Reference numeral **1253** denotes an inquirer attribute management module for managing the attributes of inquirers. Reference numeral **1254** denotes an attribute matching module for performing matching of the attribute of an inquirer and the attribute of an operator. Reference numeral **1255** denotes a terminal connection control module for informing an operator terminal of start of an inquiry based on the result of attribute matching and, when response to the inquiry is agreed, connecting the inquiry terminal and the operator terminal.

[0099] In FIG. **12**, only data and programs indispensable to this exemplary embodiment are shown, whereas versatile data and programs of the OS and the like are not shown.

(Display Screen of Inquiry Terminal)

[0100] FIG. **13**A is a diagram showing a display screen of each of the display parts **221** to **241** of the inquiry terminals **220** to **240** according to this exemplary embodiment. FIG. **13**A shows an initial screen. Because this initial screen enough shows the feature of this exemplary embodiment, description of display screens of the other inquiry terminals will be omitted.

[0101] FIG. **13**A shows an initial screen to stand by for an inquiry from an inquirer. In FIG. **13**A, reference numeral **1311** denotes an inquiry button for a person who wants to inquire in Japanese, displaying "Please help me" (Japanese). Likewise, reference numeral **1312** denotes an inquiry button for a person who wants to inquire in English. Reference numeral **1313** denotes an inquiry button for a person who wants to inquire in Chinese. Reference numeral **1314** denotes an inquiry button for a person who wants to inquire in Korean. Reference numeral **1315** denotes an inquiry button for a person who wants to inquire in French. Reference numeral **1316** denotes an inquiry button for a person who wants to inquire in German.

[0102] The inquiry button **1315** for a person who wants to inquire in French is displayed with hatching because an operator who can respond to an inquiry in French is absent at present. For example, in a case where an operator who can respond is not registered, in a case where an operator who can respond is registered but absent at present, and in a case where all of operators who can respond are responding to other inquiries, the displaying parts **221** to **241** display so that the inquirer can understand the statuses of the operators. By touching (selecting) any of the effective buttons displayed on each of the display parts **221** to **241** in FIG. **13**A, an inquirer can notify the communication processing device **210** from the inquiry terminal that he/she wants to inquire in the selected language. Alternatively, the display parts may simply display buttons representing "Japanese," "English," and so on, which may be written in the respective languages or in a common language.

(Display Screen of Operator Terminal)

[0103] FIG. **13**B is a diagram showing an inquiry informing display screen of each of the display parts **261** to **281** of the operator terminals **260** to **280** according to this exemplary embodiment. FIG. **13**B shows an example displayed on an operator terminal used by an operator who can respond in Chinese to an inquiry in Chinese. Because this screen enough shows the feature of this exemplary embodiment, the description of display screens of the other inquiry terminals will be omitted.

[0104] In FIG. **13**B, reference numeral **1321** denotes "Please help me" in Chinese. Reference numeral **1322** denotes "Please speak in Chinese" in Chinese. Reference numeral **1323** denotes a button for agreeing to respond. Reference numeral **1324** denotes a display for notifying that response to the inquiry is already completed when another operator terminal agrees to respond. As the completion notification, for example, the color of the display **1324** may change, input by the button **1323** may be suspended, and the screen returns to the standby screen. The description on the button **1323** and the display **1324** may be Chinese.

<Processing Steps by Communication Processing Device>

[0105] FIGS. **14**A and **14**B show a flowchart of a processing procedure by the communication processing device **210** according to this exemplary embodiment. The CPU **1210** shown in FIG. **12** executes this flowchart by using the RAM **1240** to realize the respective functional configuration parts shown in FIG. **5**. Moreover, although correspondence is not described, this flowchart is included in the communication processing program **1251** stored in the storage **1250** shown in FIG. **12**, whereby the respective modules are configured.

[0106] First, it is determined in step S**1411** of FIG. **14**A whether an operator terminal is initiated, and it is determined in step S**1421** whether an inquiry terminal is initiated.

[0107] When it is determined that an operator terminal is initiated, the connection controlling part **520** receives and stores an operator terminal ID into the operator terminal/operator attribute storing part **522** in step S**1413**. Next, in step S**1415**, the connection controlling part **520** receives and stores an operator ID into the operator attribute storing part **521** (also authenticates). In step S**1417**, the connection controlling part **520** acquires the attribute of the operator from the operator attribute storing part **521** based on the stored operator ID. The connection controlling part **520** associates the operator terminal ID and the operator attribute, and stores into the operator terminal/operator attribute storing part **522**.

[0108] When it is determined that an inquiry terminal is initiated, the connection controlling part **520** receives and registers an inquiry terminal ID in step S**1423**. Next, in step S**1425**, the communication processing device **210** instructs the inquiry terminal to display a standby screen as shown in FIG. **13**A, and stands by for access by an inquirer.

[0109] The communication processing device **210** determines in step S**1431** of FIG. **14**B whether an inquirer is accessing through an inquirer terminal, determines in step S**1441** whether an operator makes an initial response (agrees to respond) to the inquirer, and determines in step S**1451** whether a responding operator operates.

[0110] When determining in step S**1431** that an inquirer is accessing, the communication processing device **210** acquires a used language of the inquirer in step S**1433**. The button shown in FIG. **13**A is touched (selected) by the inquirer, and the used language of the inquirer is thereby acquired by the inquiry terminal. The used language of the inquirer is transmitted to be acquired by the communication processing device **210**. A used language of an inquirer may be inputted by the inquirer in response to a query from an inquiry terminal. Next, in step S**1435**, the terminal connecting part **525** selects an available (ready for talk) operator terminal based on the result of matching by the attribute matching part **524** between a usable language of an operator linked with an operator terminal stored in the operator terminal/operator attribute storing part **522** and the acquired inquirer's usable language. In step S**1437**, the selected operator terminal is informed so that access by the inquirer can be distinguished in the used language. The informing method may be use of a display or a speech in the used language as shown in FIG. **13**B, or may be notice in a versatile language, or may be use of a logo and a mark as far as the operator can distinguish. The notification method is not limited by the above methods.

[0111] On the other hand, when determining in step S**1441** that an operator makes an initial response (agrees to respond), in step S**1443**, the communication processing device **210** notifies the other operator terminals informed of the inquiry that response to the inquiry is already completed. A method for completion notification is not limited as mentioned before. Next, in step S**1445**, the communication processing device **210** informs the inquiry terminal accessed by the inquirer of a response by the operator. The informing method is not limited as far as the inquirer can understand. In step S**1447**, the communication processing device **210** acquires a screen retrieved from the content DB **212**, and causes the inquiry terminal and the operator terminal connected to each other to display the acquired screen as a common screen. The common screen needs not to be the above display necessarily.

An operator may instruct to display a common screen when necessary in accordance with change of the content of an inquiry by an inquirer.

[0112] When it is determined in step S**1451** that a responding operator operates, content designated by the operator is acquired from the content DB **212** in step S**1453**. In step S**1455**, the communication processing device **210** causes the inquiry terminal and the operator terminal to display the acquired content as a common screen. For example, in an airport, many people inquire about a place or a route and, in this case, the same map or floor plan is used for description. Although the above illustration is an example that an operator designates content and causes to display as a common screen, this example is part of an operation by an operator and a process according to another operation by the operator is also executed in the same manner.

[0113] Even if a place where the system is used is not an airport but a hotel, information is different, but a service to be provided and the configuration and operation are obvious from the description of this exemplary embodiment. The configuration and operation of this exemplary embodiment can be applied in other remote inquiry systems.

Third Exemplary Embodiment

[0114] Next, a communication processing system according to a third exemplary embodiment of the present invention will be described. The communication processing system according to this exemplary embodiment is different from the second exemplary embodiment in that the attribute of an operator is not previously registered in an operator terminal but inputted when the operator starts to use the operator terminal. Because the other configurations and operations are the same as those of the second exemplary embodiment, the functional configuration of a communication processing device **1510**, the processing procedure by the communication processing device **1510**, and the configuration of an operator terminal/operator attribute storing part **1522** will be described, and a description of the same configurations and operations as those of the communication processing device **210** shown in FIG. **5** will be omitted. According to this exemplary embodiment, a highly flexible system can be realized because a storage capacity for previously storing the attributes of operators is not necessary and an operator can freely participate in an operation as far as being authenticated.

<Configuration of Communication Processing Device>

[0115] FIG. **15** is a block diagram showing the configuration of the communication processing device **1510** according to this exemplary embodiment. Because the configurations and operations of a connection controlling part **1520**, other than the operator terminal/operator attribute storing part **1522**, are the same as those of the second exemplary embodiment (the connection controlling part **520** shown in FIG. **5**), the same configurations and operations will be denoted by the same reference numerals and a detailed description thereof will be omitted.

[0116] The operator terminal/operator attribute storing part **1522** of the connection controlling part **1520** stores the attribute (a usable language) of an operator that the operator inputs when starting to use an operator terminal, in association with the operator terminal.

(Operator Terminal/Operator Attribute Storing Part)

[0117] FIG. **16** is a diagram showing the configuration of the operator terminal/operator attribute storing part **1522** according to this exemplary embodiment.

[0118] In association with an ID **1601** of an operator terminal, the operator terminal/operator attribute storing part **1522** stores an operator ID **1602** of an operator in charge of the operator terminal and an input attribute **1603** inputted by the operator.

[0119] FIG. **16** shows the status of allocation of operators to operator terminals in a like manner as shown in FIG. **6**C of the second exemplary embodiment. In FIG. **16**, an operator who is not allocated to any operator terminal is not stored. The input attribute **1603** is inputted by an operator when the operator starts to use an operator terminal. Alternatively, the input attribute **1603** may be automatically inputted from an ID card of an operator.

<Processing Procedure by Communication Processing Device>

[0120] FIG. **17** is a flowchart showing a processing procedure by the communication processing device according to this exemplary embodiment. FIG. **17** is a modification of FIG. **14**A of the second exemplary embodiment, in which the processing steps for initialization of an operator terminal are changed. Because the other processing steps are the same as those of the second exemplary embodiment, the illustration and description thereof will be omitted.

[0121] When it is determined in step S**1411** that an operator terminal is initiated, the communication processing device receives and stores an operator terminal ID in step S**1413** and receives and stores an operator ID in step S**1415**, in the same manner as in the second exemplary embodiment.

[0122] After that, in step S**1717**, the communication processing device stands by for input of an operator attribute. When an operator attribute is inputted, the communication processing device stores the operator terminal ID and the inputted operator attribute in association with each other into the operator terminal/operator attribute storing part **1522** in step S**1419**. In this exemplary embodiment, an ID of an operator terminal and an operator attribute inputted from the operator terminal are used as information for associating a second communication terminal and the attribute of a responder using the second communication terminal in the communication processing device **1510**.

Fourth Exemplary Embodiment

[0123] Next, a communication processing system according to a fourth exemplary embodiment of the present invention will be described. The communication processing system according to this exemplary embodiment is different from the second exemplary embodiment in that, in a case where a used language is taken into consideration as the attribute of an operator, the adequacy of a used language is more strictly determined based on the gender, age, nationality, birthplace, occupation, and so on. For example, a difference in dialect and language depending on generations and a variation of the range of used words are also considered. Because the communication processing system according to this exemplary embodiment is configured to select and connect a matching operator in consideration of not only a used language but also a difference in the same used language, an inquirer can talk with a more adequate operator.

[0124] Because the configurations and operations, other than an operator terminal/operator attribute storing part **1810** and an inquirer attribute storing part **1820**, are the same as those of the second exemplary embodiment (the connection controlling part **520** shown in FIG. **5**), a description thereof will be omitted. Besides, the most adequate operator may be called by, in selection of an operator, sequentially narrowing down operators firstly to operators using the same language and then to operators coming from the same country or region among the operators using the same language.

(Operator Terminal/Operator Attribute Storing Part and Inquirer Attribute Storing Part)

[0125] FIG. **18** is a diagram showing the configurations of the operator terminal/operator attribute storing part **1810** and the inquirer attribute storing part **1820** according to this exemplary embodiment.

[0126] The operator terminal/operator attribute storing part **1810** stores an operator attribute **1812** in association with an operator terminal ID **1811**. The operator attribute **1812** includes not only used language but also gender, age, nationality, birthplace, occupation, and so on. The operator attribute **1812** is taken into consideration at the time of attribute matching, whereby an operator terminal used by a more adequate operator is selected.

[0127] The inquirer attribute storing part **1820** stores an inquirer attribute **1822** in association with an inquirer terminal ID **1821**. The inquirer attribute **1822** includes not only used language but also gender, age, nationality, birthplace, occupation, current status, and so on. The inquirer attribute **1822** is taken into consideration at the time of attribute matching, whereby an operator terminal used by a more adequate operator is selected. These attributes are also used as information representing the object of an inquiry by an inquirer.

Fifth Exemplary Embodiment

[0128] Next, a communication processing system according to a fifth exemplary embodiment of the present invention will be described. The communication processing system according to this exemplary embodiment is different from the second exemplary embodiment in setting priority at the time of selection of an operator. The communication processing system in this exemplary embodiment is configured to accumulate the number of receptions of inquiries today, the total response time today or the like for each of operators and control so that the operators can receive inquiries as equally as possible. Alternatively, the communication processing system may be configured to control who preferentially responds in a case where a plurality of operators simultaneously agree to respond. According to this exemplary embodiment, it is possible to equally distribute inquiry services to operators, and it is also possible to control when operators simultaneously agree to respond.

[0129] This exemplary embodiment is featured by that the processing statuses of operators are accumulated and a processing procedure by a communication processing device are changed. Because the other configurations and operations are the same as those of the second exemplary embodiment, a description thereof will be omitted. Although the priority may be set depending on the experiences and abilities of operators, the priority can be set on operators simply in advance, and such a configuration is also within the scope of the present invention.

(Processing Statuses of Operators)

[0130] FIG. **19** is a diagram showing the configuration of information **1900** representing the processing statuses of operators according to this exemplary embodiment.

[0131] The information **1900** representing the processing statuses of operators stores a number **1902** of receptions of inquiries today and a total time **1903** of response today in association with an operator ID **1901**. The number **1902** of receptions of inquiries today and the total time **1903** of inquiries today are cleared when the system is started.

<Processing Procedure by Communication Processing Device>

[0132] FIG. **20** is a flowchart showing a processing procedure by the communication processing device according to this exemplary embodiment. FIG. **20** shows steps inserted between step **S1435** and step **S1437** in steps **S1431** to **S1437** of access by an inquirer shown in FIG. **14**B.

[0133] After available operator terminals are selected based on a used language in step **S1435**, the communication processing device determines in step **S2031** whether the number of the selected available operator terminals is more than a threshold n (n represents a natural number). In a case where the number of the available operator terminals is more than the threshold n, the communication processing device, in step **S2033**, refers to the number of receptions of inquiries today in the information **1900** shown in FIG. **19** and selects n available operator terminals in increasing order of the number of receptions of inquiries today.

[0134] Next, in step **S2035**, the communication processing device determines whether there are two or more operators with the same number of receptions of inquiries. In a case where it is determined in step **S2035** that there are two or more operators with the same number of receptions of inquiries, the communication processing device selects n operator terminals in increasing order of the total response time today in step **S2037**.

[0135] Then, the communication processing device informs the operators using the selected operator terminals of access by an inquirer so that the used language is obvious.

Sixth Exemplary Embodiment

[0136] Next, a communication processing system according to a six exemplary embodiment of the present invention will be described. The communication processing system according to this exemplary embodiment is different from that of the second exemplary embodiment in not focusing on matching of used languages with a used language as the attribute of an operator but performing matching of various attributes between inquirers and operators so as to be more versatile. This exemplary embodiment enables matching between an inquirer and an operator in various systems, such as a system that an operator can move from one operator terminal to the next. For example, connection from a service center is not fixed to a predetermined operator or operator terminal, and selection corresponding to varying operators is allowed.

[0137] Because the configurations and operations, other than an operator terminal/operator attribute storing part **2110** and an inquirer attribute storing part **2120**, are the same as those of the second exemplary embodiment (the connection controlling part **520** in FIG. **5**), the description thereof will be omitted.

(Operator Terminal/Operator Attribute Storing Part and Inquirer Attribute Storing Part)

[0138] FIG. **21** is a diagram showing the configuration of the operator terminal/operator attribute storing part **2110** and the inquirer attribute storing part **2120** according to this exemplary embodiment.

[0139] The operator terminal/operator attribute storing part **2110** stores an operator attribute **2112** in association with an operator terminal ID **2111**. The operator attribute **2112** contains operators' occupations, fields of expertise, special knowledge, and so on. The operator attribute **2112** is matched in combination or separately at the time of attribute matching, and an operator terminal used by a more adequate operator is thereby selected.

[0140] Further, the inquirer attribute storing part **2120** also stores an inquirer attribute **2122** in association with an inquirer terminal ID **2121**. The inquirer attribute **2122** contains the fields, targets and contents of inquiries by inquirers, and so on. The inquirer attribute **2122** is matched in combination or separately at the time of attribute matching, and an operator terminal used by a more adequate operator is thereby selected.

Another Exemplary Embodiment

[0141] The exemplary embodiments of the present invention are described above in detail. Any and all systems or devices by any combinations of the features of the exemplary embodiments fall within the scope of the present invention.

[0142] Further, the present invention may be applied to a system configured by a plurality of equipment, or may be applied to a stand-alone device. Moreover, the present invention may also be applied in a case where control programs realizing the functions of the exemplary embodiment are supplied directly or remotely to a system or a device. Accordingly, any and all control programs installed into a computer, mediums for storing the control programs, or WWW (World Wide Web) servers for downloading the control programs in order to realize the functions of the present invention in the computer also fall within the scope of the present invention.

[0143] Although the present invention is described above referring to the respective exemplary embodiments, the present invention is not limited to the abovementioned exemplary embodiments. The configurations and details of the present invention can be modified within the scope of the present invention in various manners that can be understood by one skilled in the art.

[0144] The present invention is based upon and claims the benefit of priority from Japanese patent application No. 2011-115924, filed on May 24, 2011, the disclosure of which is incorporated herein in its entirety by reference.

DESCRIPTION OF REFERENCE NUMERALS

[0145] **100** communication processing system
[0146] **101** user communication terminal
[0147] **102** user
[0148] **103** responder communication terminal
[0149] **104** responder
[0150] **120** responder communication terminal information storing part
[0151] **140** connection controlling part
[0152] **150** network
[0153] **200** communication processing system
[0154] **210** communication processing device
[0155] **211** data server
[0156] **212** content DB
[0157] **213** server (PBX)
[0158] **220** inquiry terminal
[0159] **221** display part
[0160] **222** headset
[0161] **223** video camera
[0162] **260** operator terminal
[0163] **261** display part
[0164] **262** headset
[0165] **263** video camera
[0166] **300** network
[0167] **400** terminal controlling part
[0168] **410** communication controlling part
[0169] **420** data controlling part
[0170] **430** screen controlling part
[0171] **440** speech controlling part
[0172] **450** transmitting/receiving part
[0173] **510** communication controlling part
[0174] **520** connection controlling part
[0175] **521** operator attribute storing part
[0176] **522** operator terminal/operator attribute storing part
[0177] **523** inquirer attribute storing part
[0178] **524** attribute matching part
[0179] **525** terminal connecting part
[0180] **530** speech connecting part
[0181] **540** content controlling part
[0182] **1210** CPU
[0183] **1220** ROM
[0184] **1240** RAM
[0185] **1250** storage
[0186] **1510** communication processing device
[0187] **1520** connection controlling part
[0188] **1522** operator terminal/operator attribute storing part

What is claimed is:

1. A communication processing system including user communication terminals each operated by a user and responder communication terminals each operated by a responder responding to an inquiry from the user, the communication processing system comprising:

a responder communication terminal information storing unit for associating and storing each of the responder communication terminals and a responder attribute of the responder operating the responder communication terminal; and

a connection controlling unit for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing unit and connect the responder communication terminal associated with the responder attribute to the user communication terminal.

2. The communication processing system according to claim **1**, wherein:

the user communication terminal includes a user inputting unit for accepting the user attribute inputted therein; and

the connection controlling unit includes a notifying unit for, by referring to the responder communication terminal information storing unit searching the responder attribute corresponding to the inputted user attribute accepted by the user inputting unit, and notifying the responder communication terminal associated with the responder attribute of reception of an inquiry from the user.

3. The communication processing system according to claim 2, wherein the notifying unit is configured to notify the responder communication terminal of reception of an inquiry from the user together with the user attribute.

4. The communication processing system according to claim 1, wherein the responder communication terminal includes a responder inputting unit for accepting information inputted therein for associating the responder communication terminal and the responder attribute of the responder operating the responder communication terminal,

the communication processing system further comprising a responder information storing unit for associating and storing an identifier for identifying the responder and the responder attribute, wherein:

the inputted information accepted by the responder inputting unit includes the identifier of the responder operating the responder communication terminal; and

the responder communication terminal information storing unit is configured to associate and store the responder attribute retrieved from the responder information storing unit and the responder communication terminal, based on the identifier of the responder.

5. The communication processing system according to claim 4, wherein:

the inputted information accepted by the responder inputting unit includes the responder attribute of the responder operating the responder communication terminal; and

the responder communication terminal information storing unit is configured to associate and store the responder attribute that the input thereof is accepted by the responder inputting unit and the responder communication terminal.

6. The communication processing system according to claim 1, wherein:

the user attribute includes a used language of the user; and

the responder attribute includes a usable language of the responder.

7. The communication processing system according to claim 1, wherein the responder attribute includes at least one of age, gender, nationality, birthplace and occupation as information for facilitating communication between the user and the responder.

8. The communication processing system according to claim 1, wherein the user attribute includes at least one of age, gender, occupation and current status of the user as information representing an object of an inquiry from the user.

9. The communication processing system according to claim 2, wherein the notifying unit is configured to, when agreement to respond by the responder of one of the responder communication terminals is received, notify the other responder communication terminal except the responder communication terminal transmitting the agreement to respond that the inquiry from the user is already handled.

10. The communication processing system according to claim 9, wherein the notifying unit is configured to, when the agreement to respond by the responder of each of two or more of the responder communication terminals is received, accept the agreement to respond by the responder selected in accordance with a prioritization condition.

11. The communication processing system according to claim 1, wherein the user communication terminals and the responder communication terminals each have a speech controlling unit for controlling output of a speech sound and a screen controlling unit for generating screen data to be displayed on a display part.

12. The communication processing system according to claim 1, further comprising:

a content storing unit for storing content in association with the user attribute; and

an outputting unit for, based on the user attribute and the responder attribute, outputting the content stored in the content storing unit to the user communication terminal and the responder communication terminal associated with the responder attribute so that the user communication terminal and the responder communication terminal can share the content.

13. A method for communication processing by a communication processing system including user communication terminals each operated by a user and responder communication terminals each operated by a responder responding to an inquiry from the user, the communication processing system including a responder communication terminal information storing unit for associating and storing each of the responder communication terminals and a responder attribute of the responder operating the responder communication terminal,

the method comprising controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing unit and connect the responder communication terminal associated with the responder attribute to the user communication terminal.

14. A communication processing device comprising:

a responder communication terminal information storing unit for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user and a responder attribute of the responder operating the responder communication terminal; and

a connection controlling unit for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing unit and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

15. A method for control by a communication processing device including a responder communication terminal information storing unit for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user and a responder attribute of the responder operating the responder communication terminal,

the method comprising controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing unit and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

16. A non-transitory computer-readable medium storing a program comprising instructions for causing a communication processing device, which includes a responder communication terminal information storing unit for associating and storing each of responder communication terminals each operated by a responder responding to an inquiry from a user

and a responder attribute of the responder operating the responder communication terminal, to realize a connection controlling unit for controlling to search the responder attribute corresponding to a user attribute of the user by referring to the responder communication terminal information storing unit and connect the responder communication terminal associated with the responder attribute to the user communication terminal operated by the user.

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