FIG.1

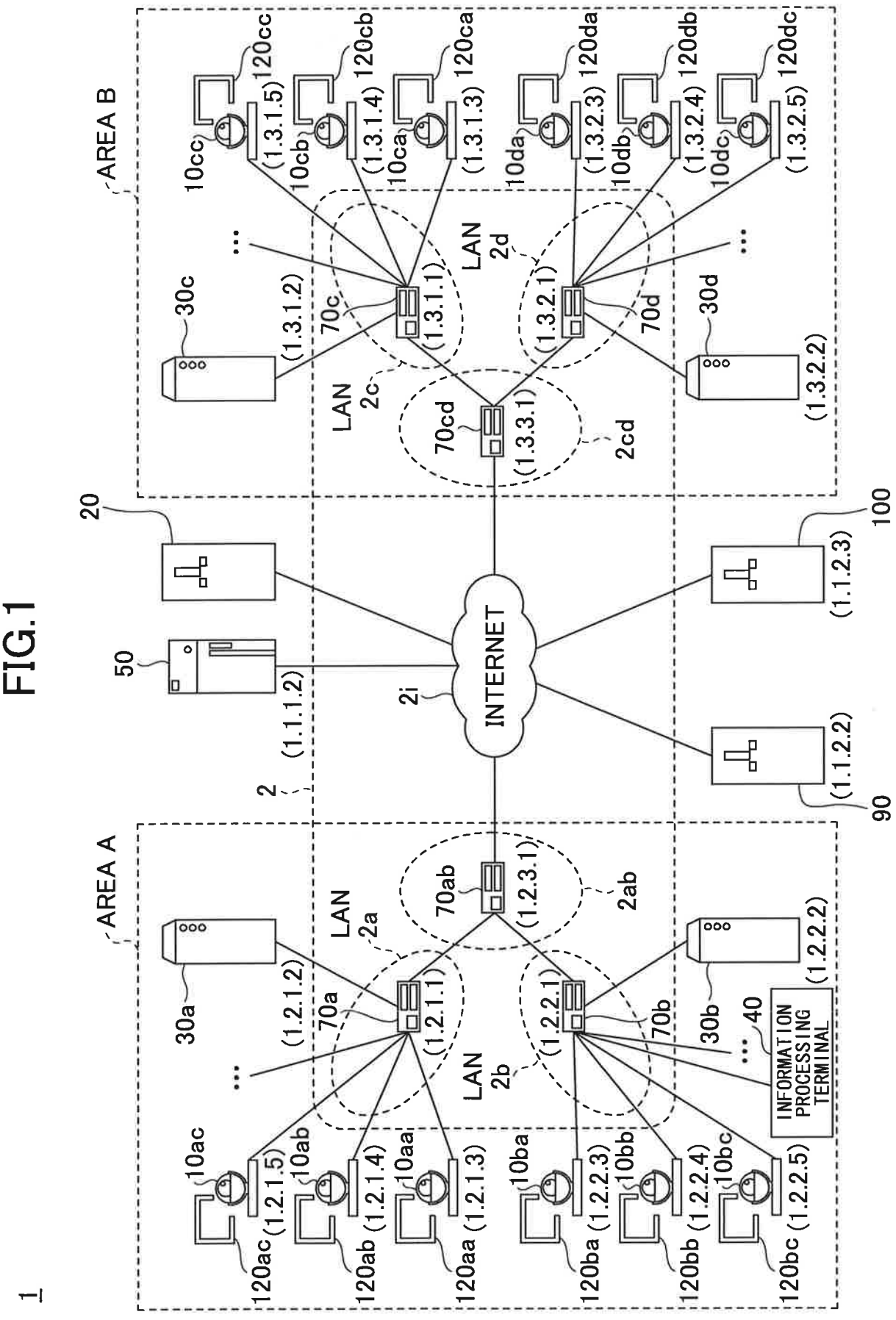

1
AREA A
AREA B
INTERNET
LAN 2a
LAN 2b
LAN 2c
LAN 2d
2
2i
2ab
2cd
20
50
90
100
30a
30b
30c
30d
40
70a
70b
70c
70d
70ab
70cd
10aa
10ab
10ac
10ba
10bb
10bc
10ca
10cb
10cc
10da
10db
10dc
120aa
120ab
120ac
120ba
120bb
120bc
120ca
120cb
120cc
120da
120db
120dc
(1.1.1.2)
(1.1.2.2)
(1.1.2.3)
(1.2.1.1)
(1.2.1.2)
(1.2.1.3)
(1.2.1.4)
(1.2.1.5)
(1.2.2.1)
(1.2.2.2)
(1.2.2.3)
(1.2.2.4)
(1.2.2.5)
(1.2.3.1)
(1.3.1.1)
(1.3.1.2)
(1.3.1.3)
(1.3.1.4)
(1.3.1.5)
(1.3.2.1)
(1.3.2.2)
(1.3.2.3)
(1.3.2.4)
(1.3.2.5)
(1.3.3.1)
INFORMATION PROCESSING TERMINAL

FIG.2

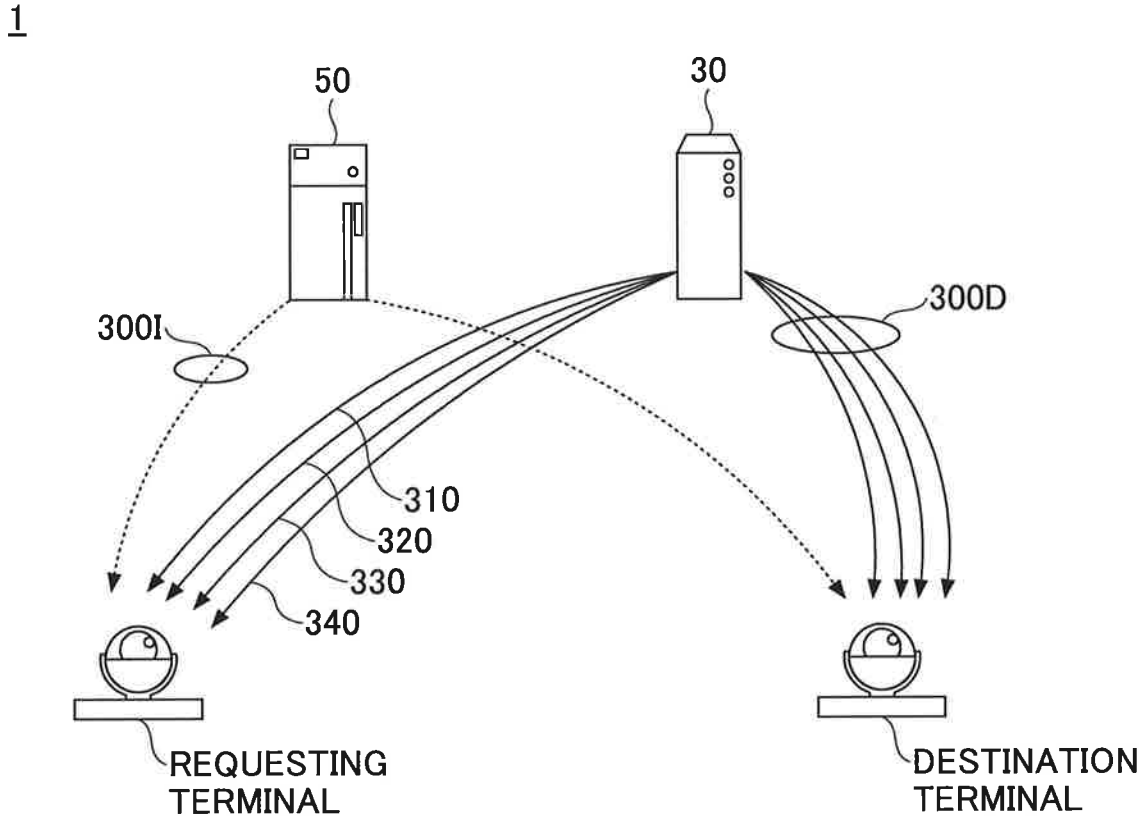
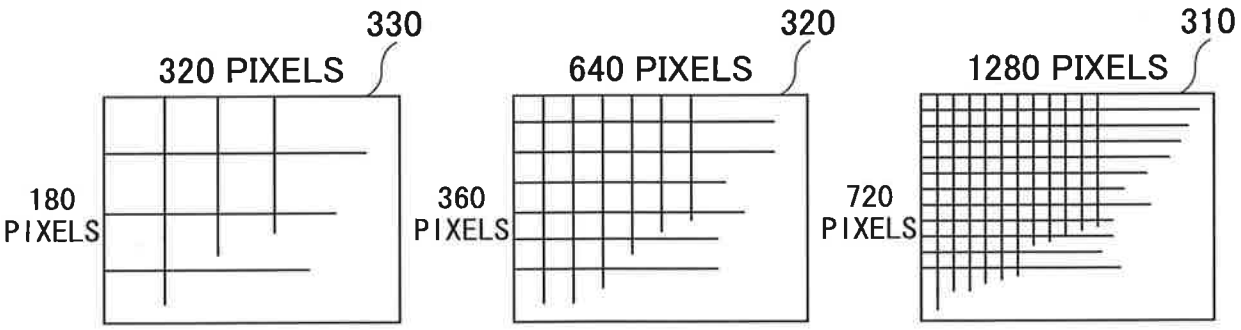

1
50
30
300I
300D
310
320
330
340
REQUESTING TERMINAL
DESTINATION TERMINAL

FIG.3


330
320 PIXELS
180 PIXELS
320
640 PIXELS
360 PIXELS
310
1280 PIXELS
720 PIXELS

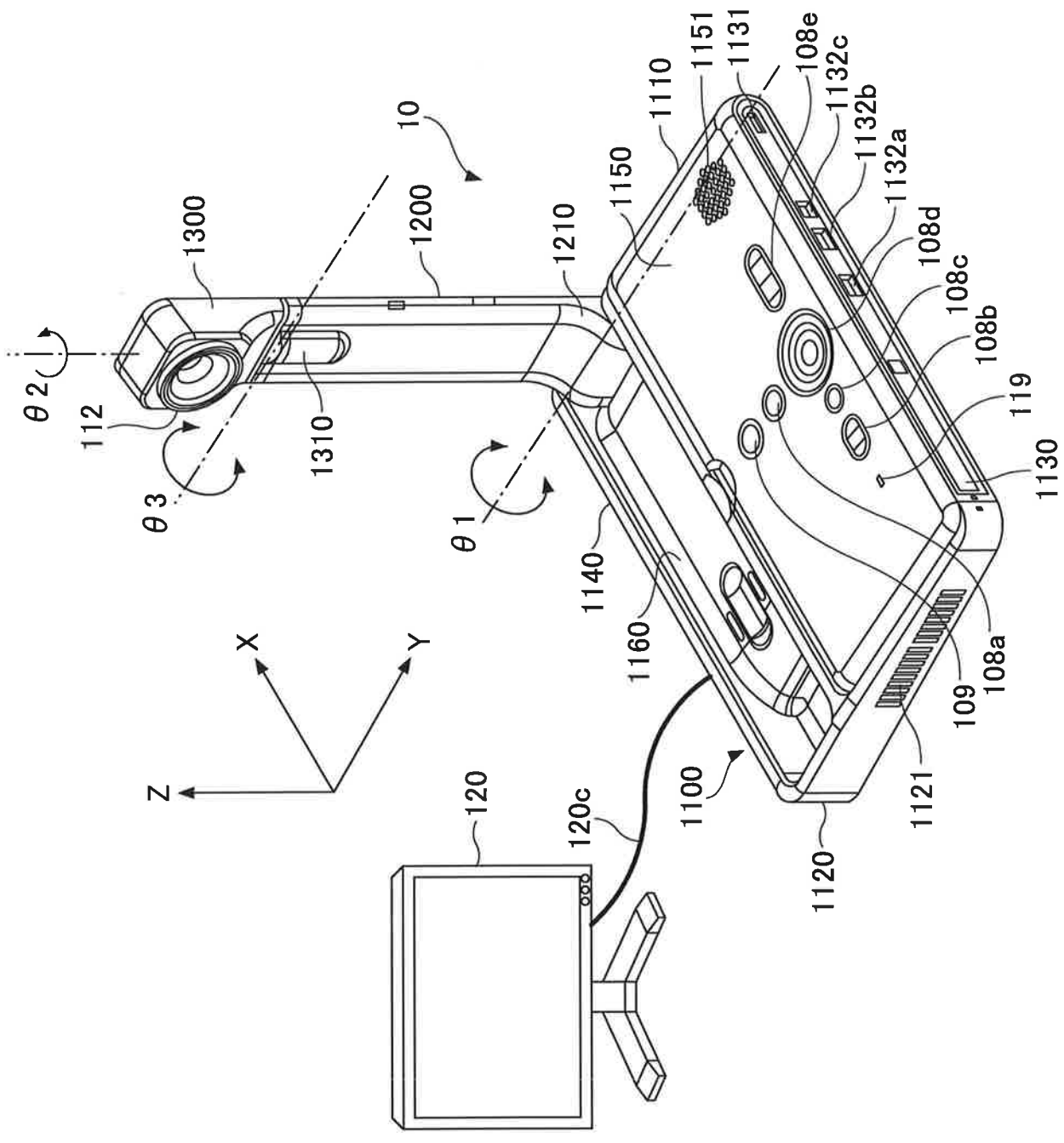
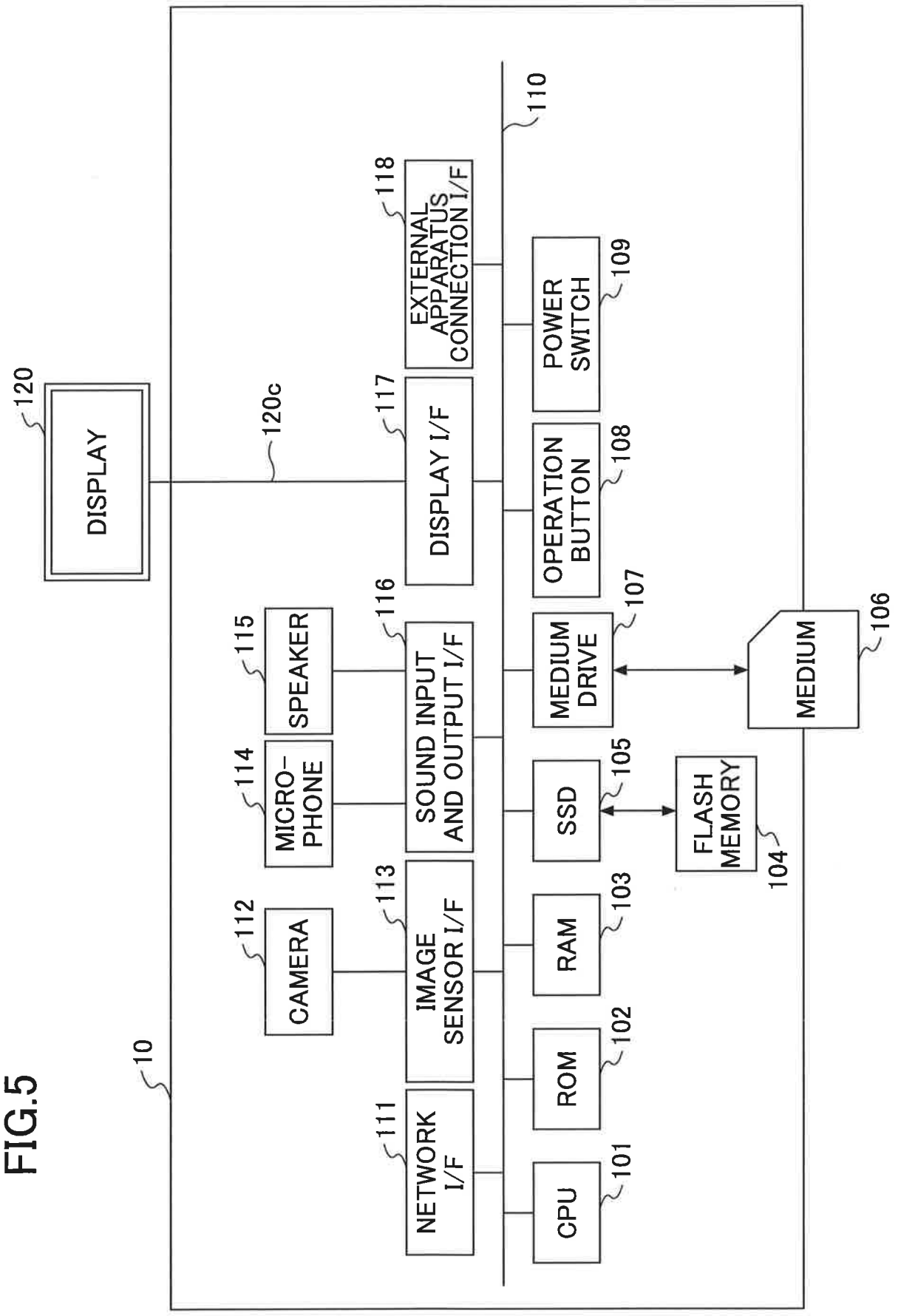

10
1300
1200
1210
1150
1110
1151
1131
108e
1132c
1132b
1132a
108d
108c
108b
119
1130
θ2
112
θ3
1310
θ1
1140
1160
108a
109
1121
1120
1100
120c
120
X
Y
Z

FIG.4

FIG.5


10
DISPLAY
120
120c
DISPLAY I/F
117
EXTERNAL APPARATUS CONNECTION I/F
118
110
POWER SWITCH
109
OPERATION BUTTON
108
MEDIUM DRIVE
107
MEDIUM
106
SSD
105
FLASH MEMORY
104
RAM
103
ROM
102
CPU
101
NETWORK I/F
111
IMAGE SENSOR I/F
113
SOUND INPUT AND OUTPUT I/F
116
CAMERA
112
MICRO-PHONE
114
SPEAKER
115

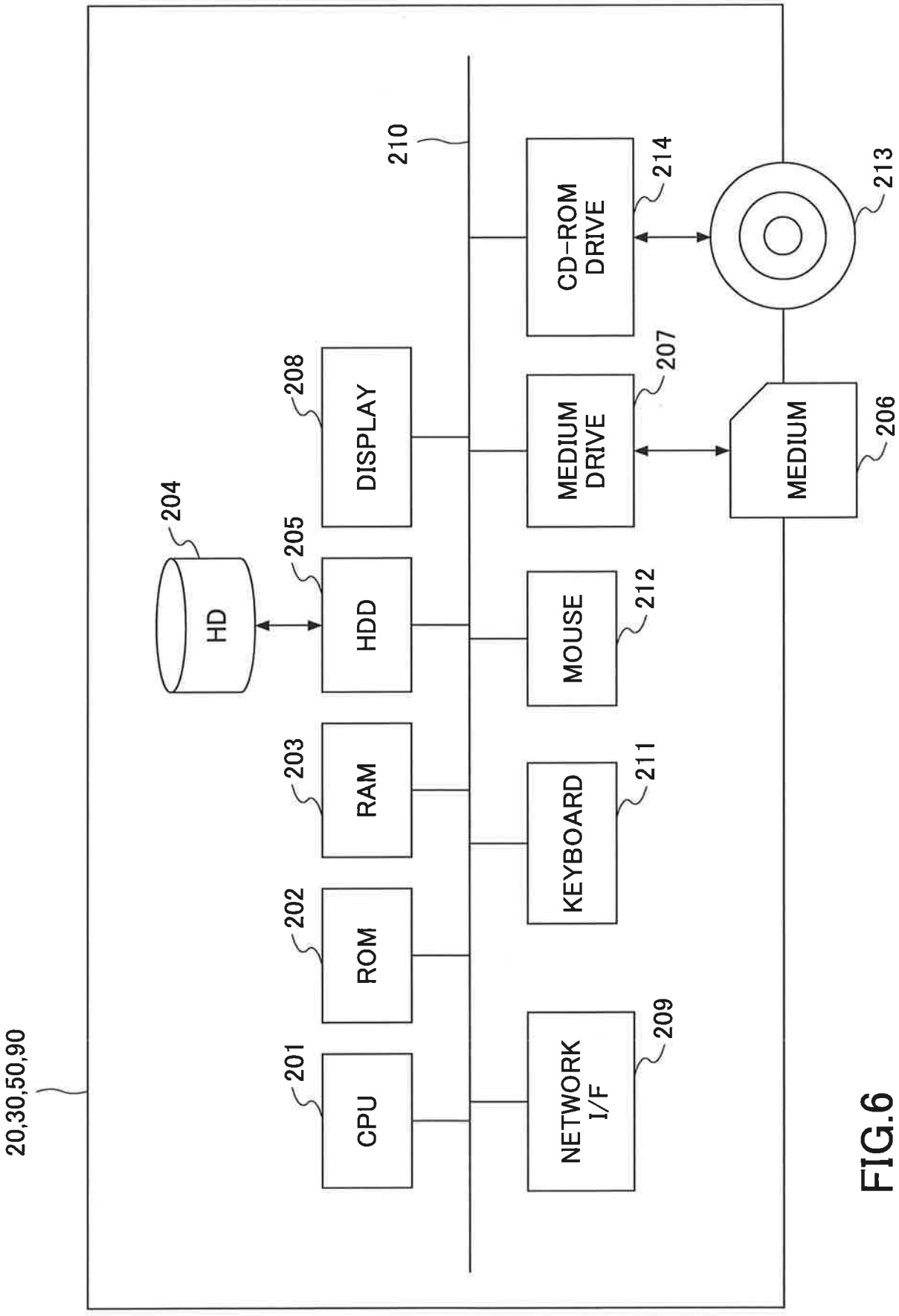

20,30,50,90
CPU
201
ROM
202
RAM
203
HDD
205
HD
204
DISPLAY
208
NETWORK I/F
209
KEYBOARD
211
MOUSE
212
MEDIUM DRIVE
207
CD-ROM DRIVE
214
210
MEDIUM
206
213

FIG.6

FIG.7

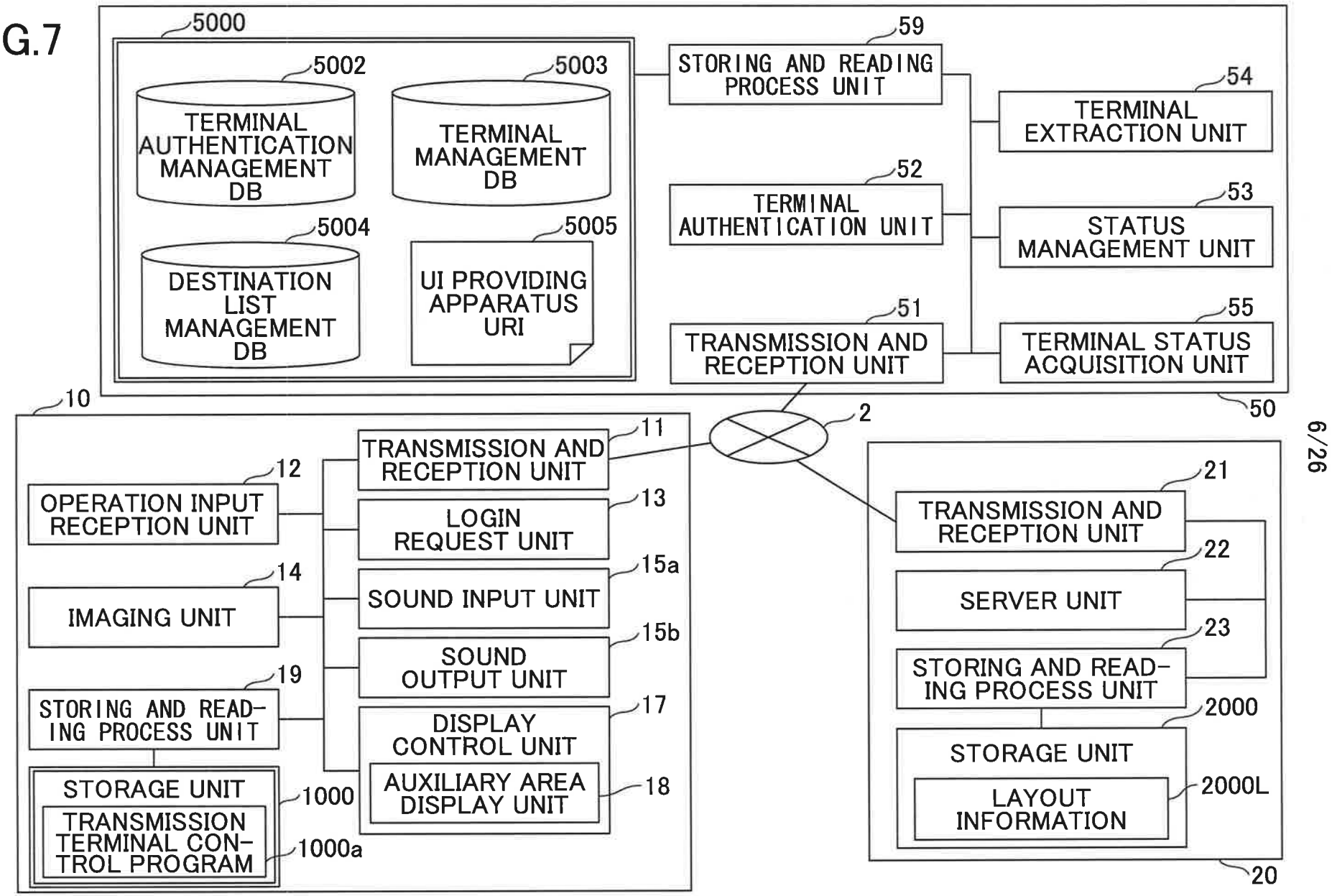

5000
5002
TERMINAL AUTHENTICATION MANAGEMENT DB
5003
TERMINAL MANAGEMENT DB
5004
DESTINATION LIST MANAGEMENT DB
5005
UI PROVIDING APPARATUS URI
59
STORING AND READING PROCESS UNIT
52
TERMINAL AUTHENTICATION UNIT
51
TRANSMISSION AND RECEPTION UNIT
54
TERMINAL EXTRACTION UNIT
53
STATUS MANAGEMENT UNIT
55
TERMINAL STATUS ACQUISITION UNIT
50
2
10
11
TRANSMISSION AND RECEPTION UNIT
12
OPERATION INPUT RECEPTION UNIT
13
LOGIN REQUEST UNIT
14
IMAGING UNIT
15a
SOUND INPUT UNIT
15b
SOUND OUTPUT UNIT
19
STORING AND READING PROCESS UNIT
17
DISPLAY CONTROL UNIT
18
AUXILIARY AREA DISPLAY UNIT
STORAGE UNIT
1000
TRANSMISSION TERMINAL CONTROL PROGRAM
1000a
21
TRANSMISSION AND RECEPTION UNIT
22
SERVER UNIT
23
STORING AND READING PROCESS UNIT
2000
STORAGE UNIT
2000L
LAYOUT INFORMATION
20

FIG.8

5002T

TERMINAL ID	PASSWORD
01aa	aaaa
01ab	abab
01ba	baba
...	...

5003T

TERMINAL ID	DESTINATION NAME	OPERATIONAL STATUS	RECEIVED DATE AND TIME	TERMINAL IP ADDRESS
01aa	JAPAN TOKYO OFFICE AA TERMINAL	ONLINE (TRANSMISSION POSSIBLE)	2009.11.10.13:40	1.2.1.3
01ab	JAPAN TOKYO OFFICE AB TERMINAL	OFFLINE	2009.11.09.12:00	1.2.1.4
...	...	...	...	...
01ba	JAPAN OSAKA OFFICE BA TERMINAL	ONLINE (TRANSMISSION POSSIBLE)	2009.11.10.13:45	1.2.2.3
01bb	JAPAN OSAKA OFFICE BB TERMINAL	ONLINE (TRANSMISSION POSSIBLE)	2009.11.10.13:50	1.2.2.4
...	...	...	...	...
01ca	USA NEW YORK OFFICE CA TERMINAL	OFFLINE	2009.11.10.12:45	1.3.1.3
01cb	USA NEW YORK OFFICE CB TERMINAL	ONLINE (UNDER TRANSMISSION)	2009.11.10.13:55	1.3.1.4
...	...	...	...	...
01da	USA WASHINGTON OFFICE DA TERMINAL	OFFLINE	2009.11.08.12:45	1.3.2.3
01db	USA WASHINGTON OFFICE DB TERMINAL	ONLINE (UNDER TRANSMISSION)	2009.11.10.12:45	1.3.2.4
...	...	...	...	...

FIG.9A

5003T

TERMINAL ID	DESTINATION NAME	OPERATIONAL STATUS	RECEIVED DATE AND TIME	TERMINAL IP ADDRESS
01aa	JAPAN TOKYO OFFICE AA TERMINAL	ONLINE (UNDER TRANSMISSION)	2009.11.10.13:40	1.2.1.3
01ab	JAPAN TOKYO OFFICE AB TERMINAL	OFFLINE	2009.11.09.12:00	1.2.1.4
...	...	...	...	...
01ba	JAPAN OSAKA OFFICE BA TERMINAL	ONLINE (TRANSMISSION POSSIBLE)	2009.11.10.13:45	1.2.2.3
01bb	JAPAN OSAKA OFFICE BB TERMINAL	ONLINE (TRANSMISSION POSSIBLE)	2009.11.10.13:50	1.2.2.4
...	...	...	...	...
01ca	USA NEW YORK OFFICE CA TERMINAL	OFFLINE	2009.11.10.12:45	1.3.1.3
01cb	USA NEW YORK OFFICE CB TERMINAL	ONLINE (UNDER TRANSMISSION)	2009.11.10.13:55	1.3.1.4
...	...	...	...	...
01da	USA WASHINGTON OFFICE DA TERMINAL	OFFLINE	2009.11.08.12:45	1.3.2.3
01db	USA WASHINGTON OFFICE DB TERMINAL	ONLINE (UNDER TRANSMISSION)	2009.11.10.12:45	1.3.2.4
...	...	...	...	...

FIG.9B

FIG.10

5004T

REQUESTING TERMINAL ID	DESTINATION TERMINAL ID
01aa	01ab,01ba,01db
01ab	01aa,01ca,01cb
01ba	01aa,01ab,01ca,01cb,01da,01db
・・・	・・・
01db	01aa,01ab,01ba,・・・,01da,01ca,01cb,・・・,01da

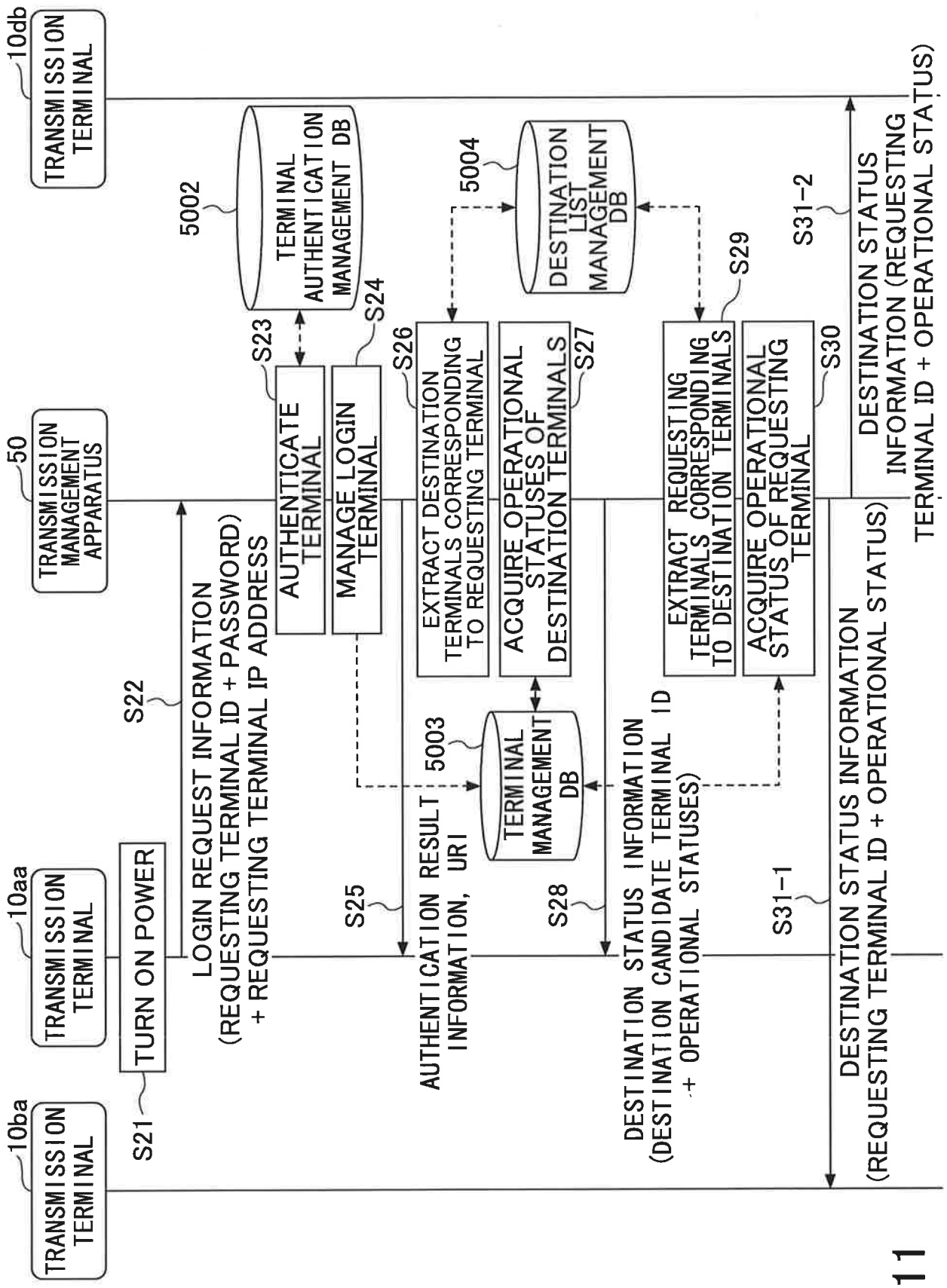

10ba
TRANSMISSION TERMINAL
10aa
TRANSMISSION TERMINAL
50
TRANSMISSION MANAGEMENT APPARATUS
10db
TRANSMISSION TERMINAL
5002
TERMINAL AUTHENTICATION MANAGEMENT DB
5003
TERMINAL MANAGEMENT DB
5004
DESTINATION LIST MANAGEMENT DB
S21
TURN ON POWER
S22
LOGIN REQUEST INFORMATION (REQUESTING TERMINAL ID + PASSWORD) + REQUESTING TERMINAL IP ADDRESS
S23
AUTHENTICATE TERMINAL
S24
MANAGE LOGIN TERMINAL
S25
AUTHENTICATION RESULT INFORMATION, URI
S26
EXTRACT DESTINATION TERMINALS CORRESPONDING TO REQUESTING TERMINAL
S27
ACQUIRE OPERATIONAL STATUSES OF DESTINATION TERMINALS
S28
DESTINATION STATUS INFORMATION (DESTINATION CANDIDATE TERMINAL ID + OPERATIONAL STATUSES)
S29
EXTRACT REQUESTING TERMINALS CORRESPONDING TO DESTINATION TERMINALS
S30
ACQUIRE OPERATIONAL STATUS OF REQUESTING TERMINAL
S31-1
DESTINATION STATUS INFORMATION (REQUESTING TERMINAL ID + OPERATIONAL STATUS)
S31-2
DESTINATION STATUS INFORMATION (REQUESTING TERMINAL ID + OPERATIONAL STATUS)

FIG.11

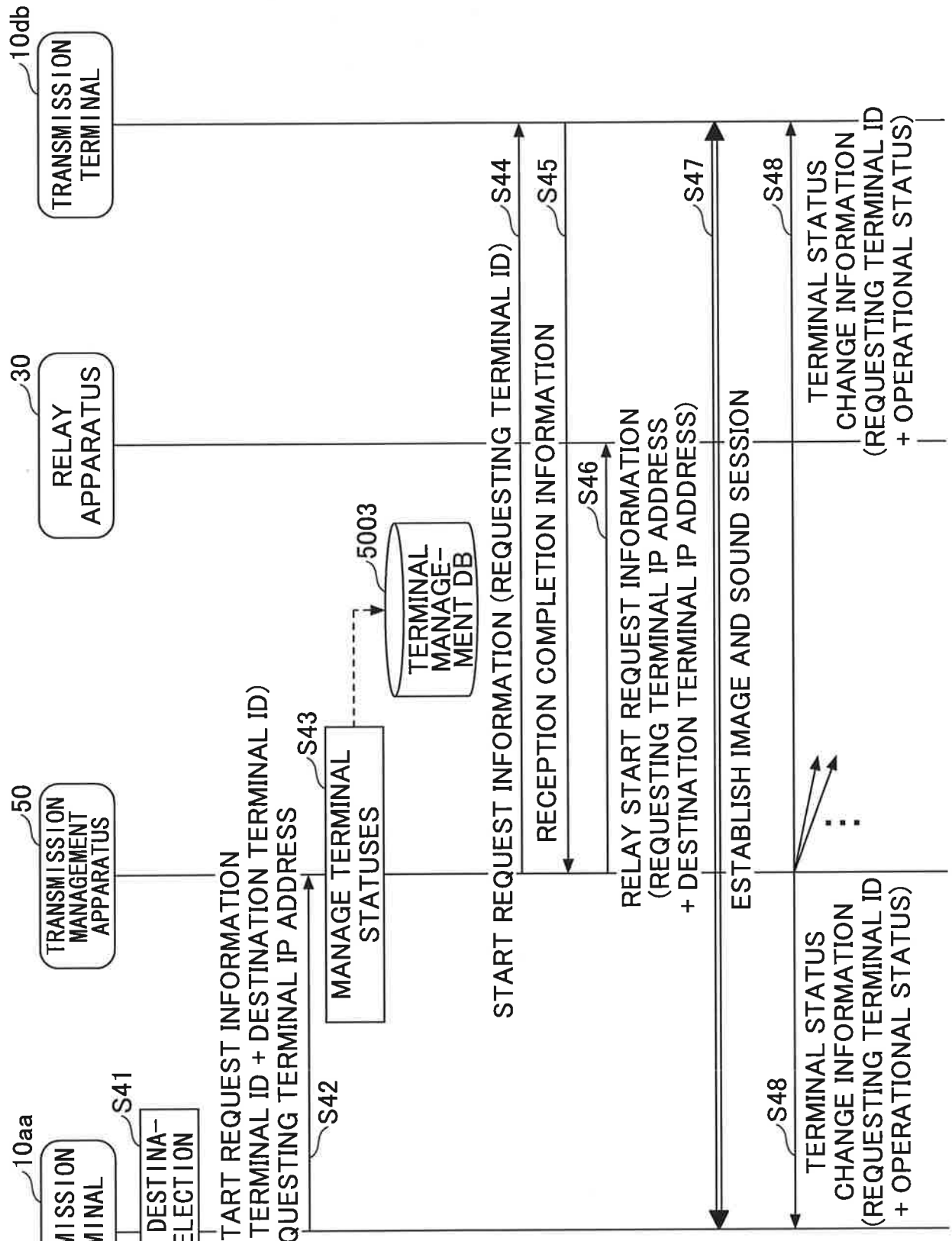

10aa
TRANSMISSION TERMINAL
S41
RECEIVE DESTINATION SELECTION
50
TRANSMISSION MANAGEMENT APPARATUS
30
RELAY APPARATUS
10db
TRANSMISSION TERMINAL
START REQUEST INFORMATION (REQUESTING TERMINAL ID + DESTINATION TERMINAL ID) + REQUESTING TERMINAL IP ADDRESS
S42
S43
MANAGE TERMINAL STATUSES
5003
TERMINAL MANAGEMENT DB
START REQUEST INFORMATION (REQUESTING TERMINAL ID)
S44
RECEPTION COMPLETION INFORMATION
S45
S46
RELAY START REQUEST INFORMATION (REQUESTING TERMINAL IP ADDRESS + DESTINATION TERMINAL IP ADDRESS)
S47
ESTABLISH IMAGE AND SOUND SESSION
S48
TERMINAL STATUS CHANGE INFORMATION (REQUESTING TERMINAL ID + OPERATIONAL STATUS)
S48
TERMINAL STATUS CHANGE INFORMATION (REQUESTING TERMINAL ID + OPERATIONAL STATUS)

FIG.12

FIG.13

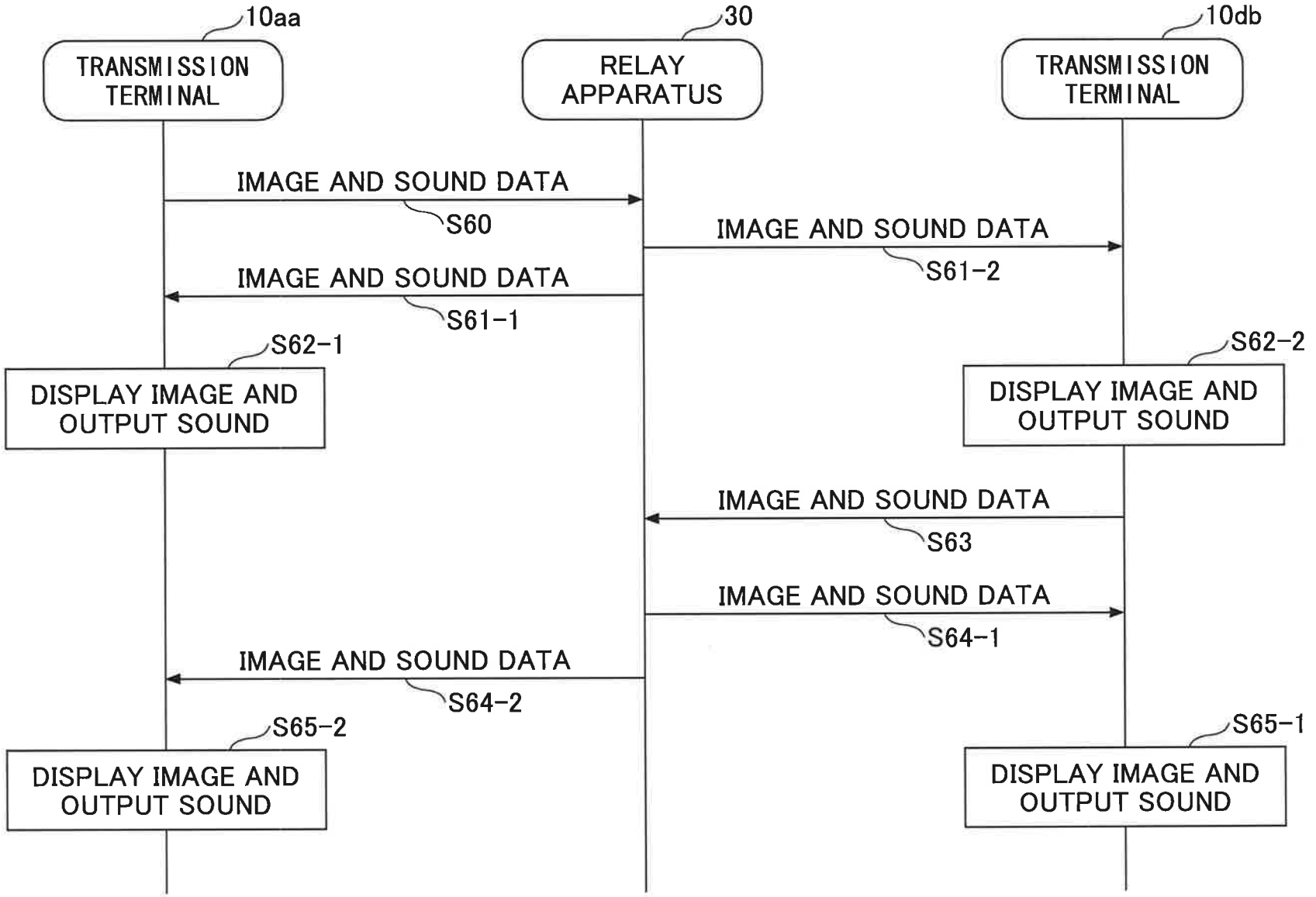

10aa
TRANSMISSION TERMINAL
30
RELAY APPARATUS
10db
TRANSMISSION TERMINAL
IMAGE AND SOUND DATA
S60
IMAGE AND SOUND DATA
S61-2
IMAGE AND SOUND DATA
S61-1
S62-1
DISPLAY IMAGE AND OUTPUT SOUND
S62-2
DISPLAY IMAGE AND OUTPUT SOUND
IMAGE AND SOUND DATA
S63
IMAGE AND SOUND DATA
S64-1
IMAGE AND SOUND DATA
S64-2
S65-2
DISPLAY IMAGE AND OUTPUT SOUND
S65-1
DISPLAY IMAGE AND OUTPUT SOUND

FIG.14

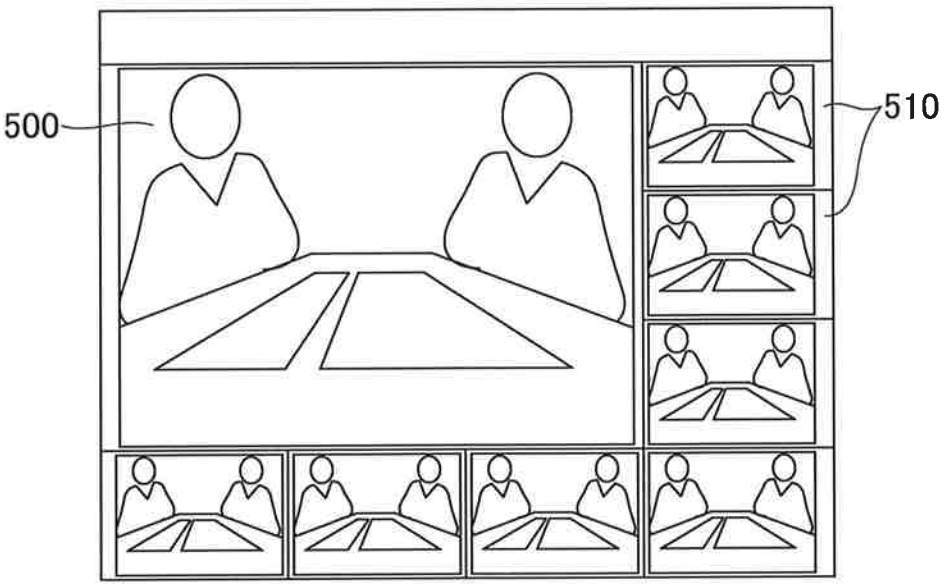
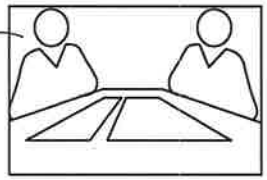


FIG.15

CONFERENCE INFORMATION DETAILS
LIST OF BASES WHICH PARTICIPATE IN CONFERENCE IS AS FOLLOWS

520



TERMINAL NAME	TERMINAL ID
01: JAPAN TOKYO OFFICE AA TERMINAL	01aa
02	01cb
03: USA WASHINGTON OFFICE DB TERMINAL	01db

530

FIG.16

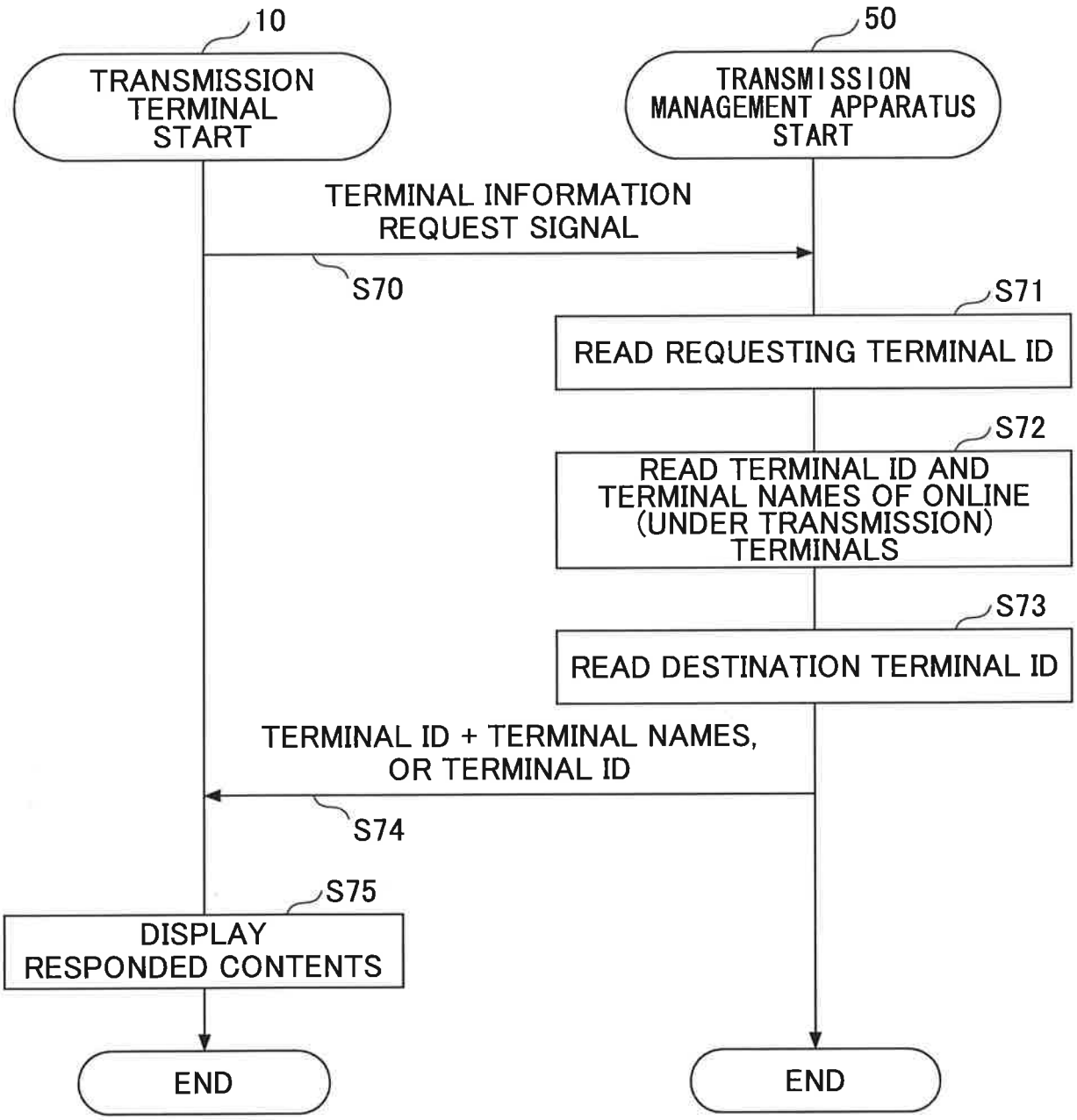

10
TRANSMISSION TERMINAL START
50
TRANSMISSION MANAGEMENT APPARATUS START
TERMINAL INFORMATION REQUEST SIGNAL
S70
S71
READ REQUESTING TERMINAL ID
S72
READ TERMINAL ID AND TERMINAL NAMES OF ONLINE (UNDER TRANSMISSION) TERMINALS
S73
READ DESTINATION TERMINAL ID
TERMINAL ID + TERMINAL NAMES, OR TERMINAL ID
S74
S75
DISPLAY RESPONDED CONTENTS
END
END

FIG.17A

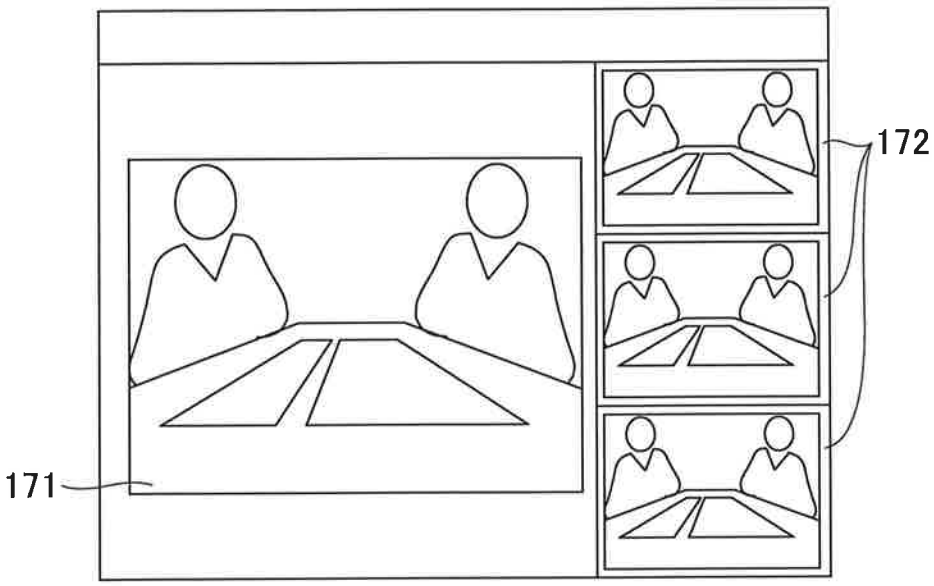
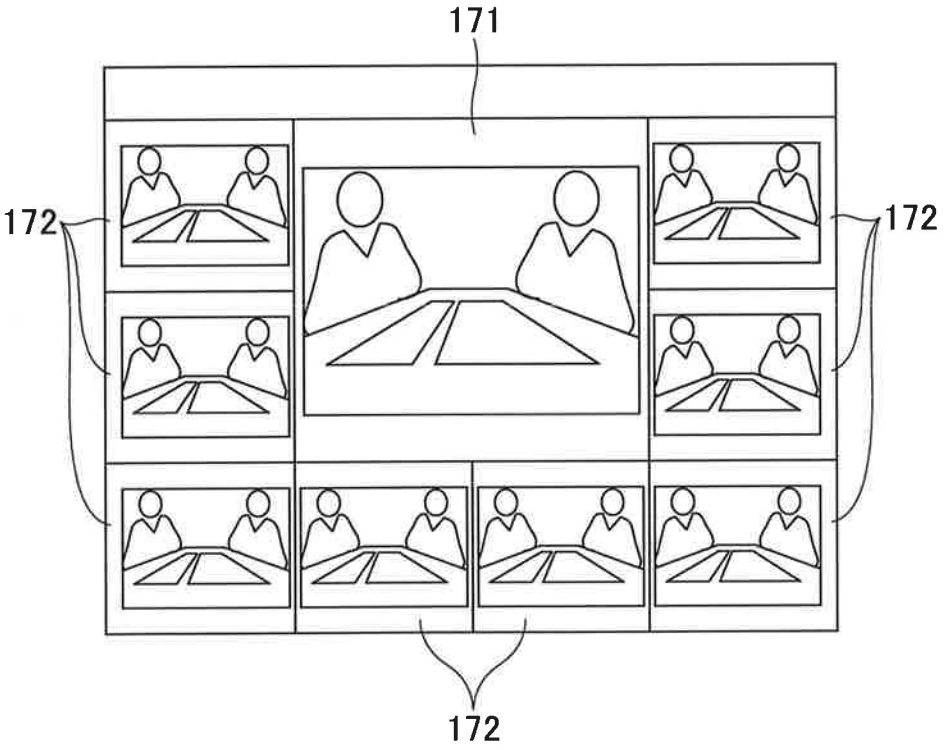


FIG.17B



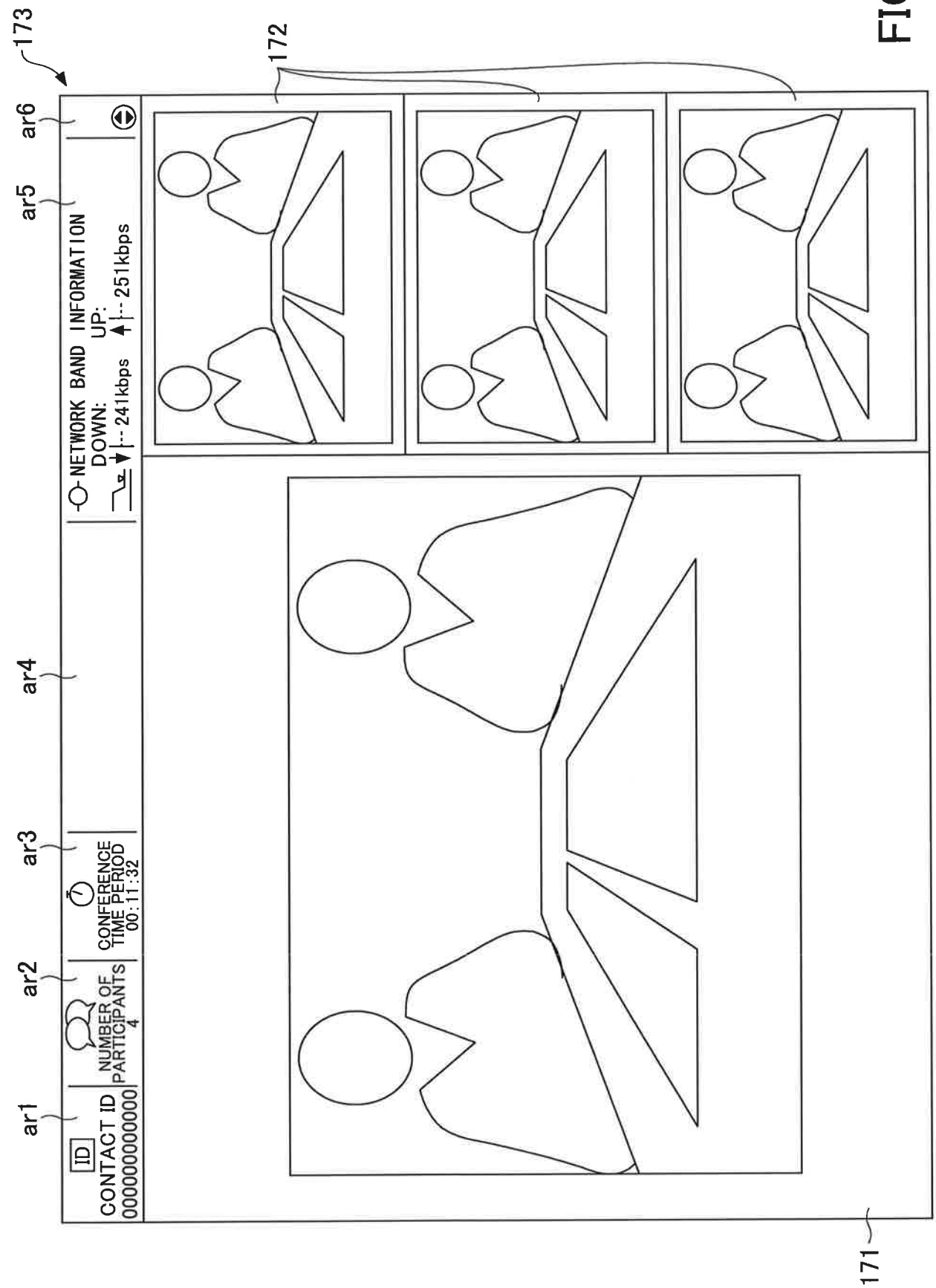

173
172
ar1
ar2
ar3
ar4
ar5
ar6
ID
CONTACT ID
00000000000
NUMBER OF PARTICIPANTS
4
CONFERENCE TIME PERIOD
00:11:32
NETWORK BAND INFORMATION
DOWN:
241kbps
UP:
251kbps
171

FIG.18

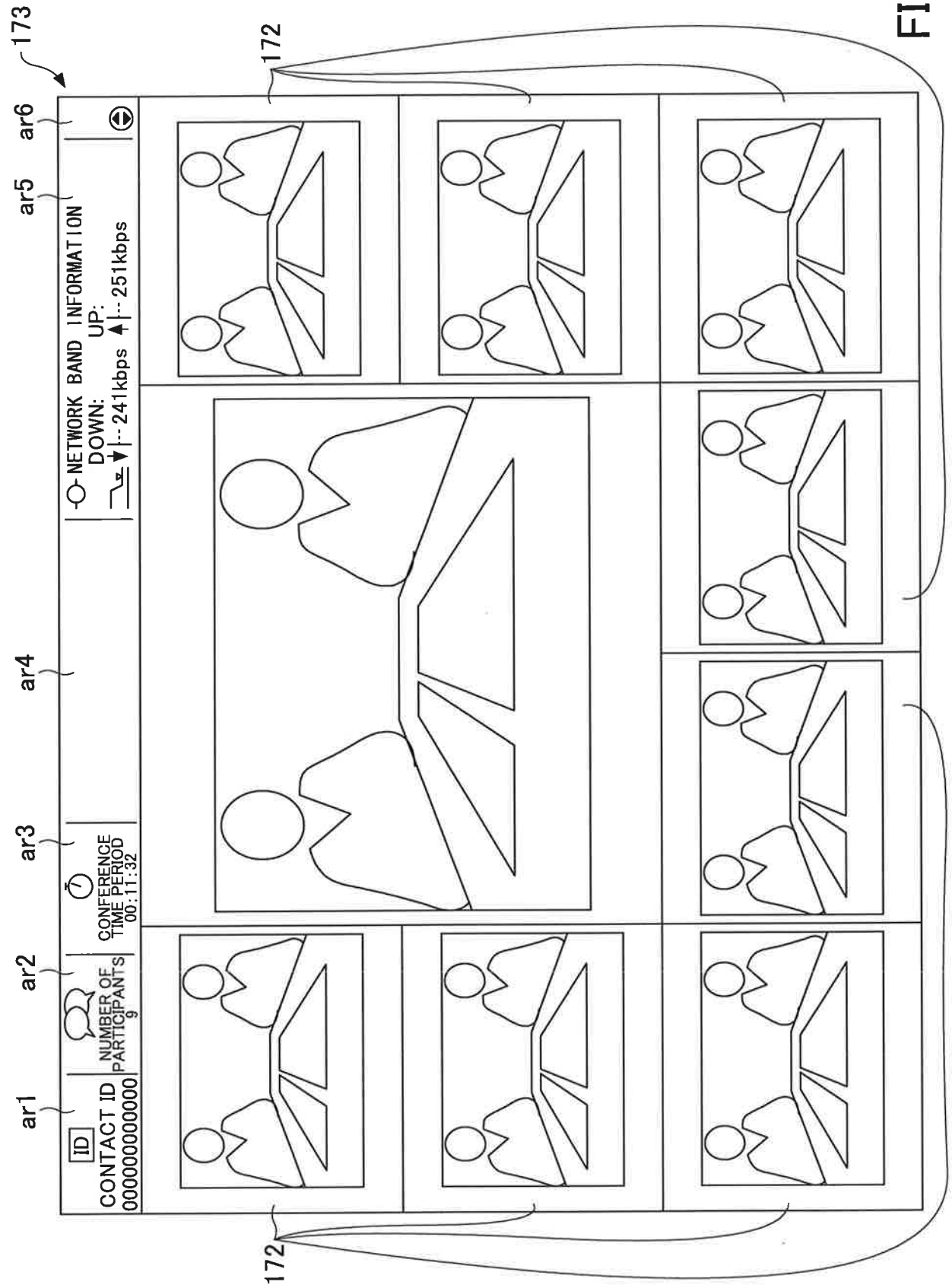

173
172
172
ar1
ar2
ar3
ar4
ar5
ar6
ID
CONTACT ID
00000000000
NUMBER OF PARTICIPANTS
9
CONFERENCE TIME PERIOD
00:11:32
NETWORK BAND INFORMATION
DOWN:
241kbps
UP:
251kbps

FIG.19

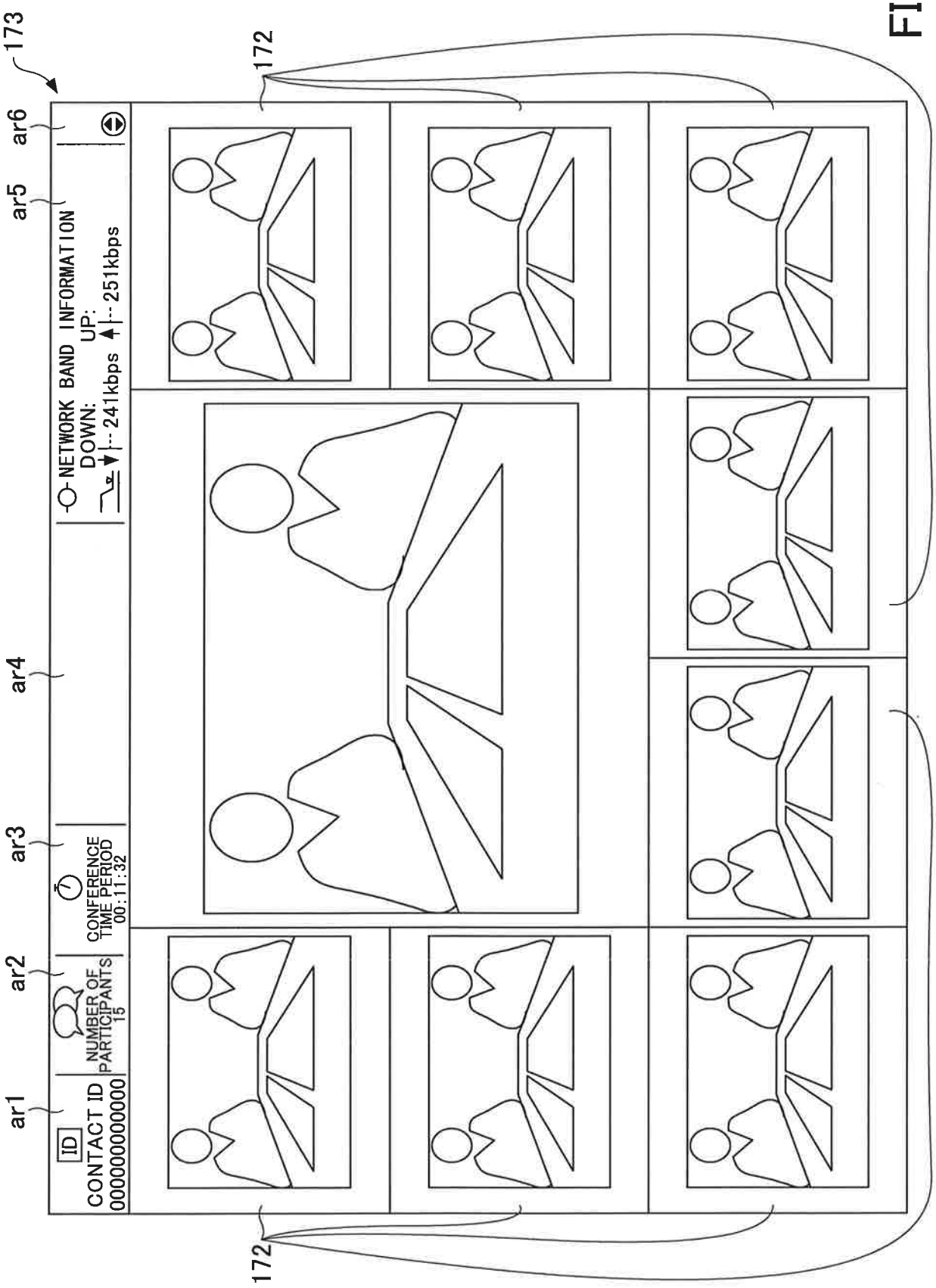

173
172
172
ar1
ar2
ar3
ar4
ar5
ar6
ID
CONTACT ID
000000000000
NUMBER OF PARTICIPANTS
15
CONFERENCE TIME PERIOD
00:11:32
NETWORK BAND INFORMATION
DOWN:
241kbps
UP:
251kbps

FIG.20

FIG.21

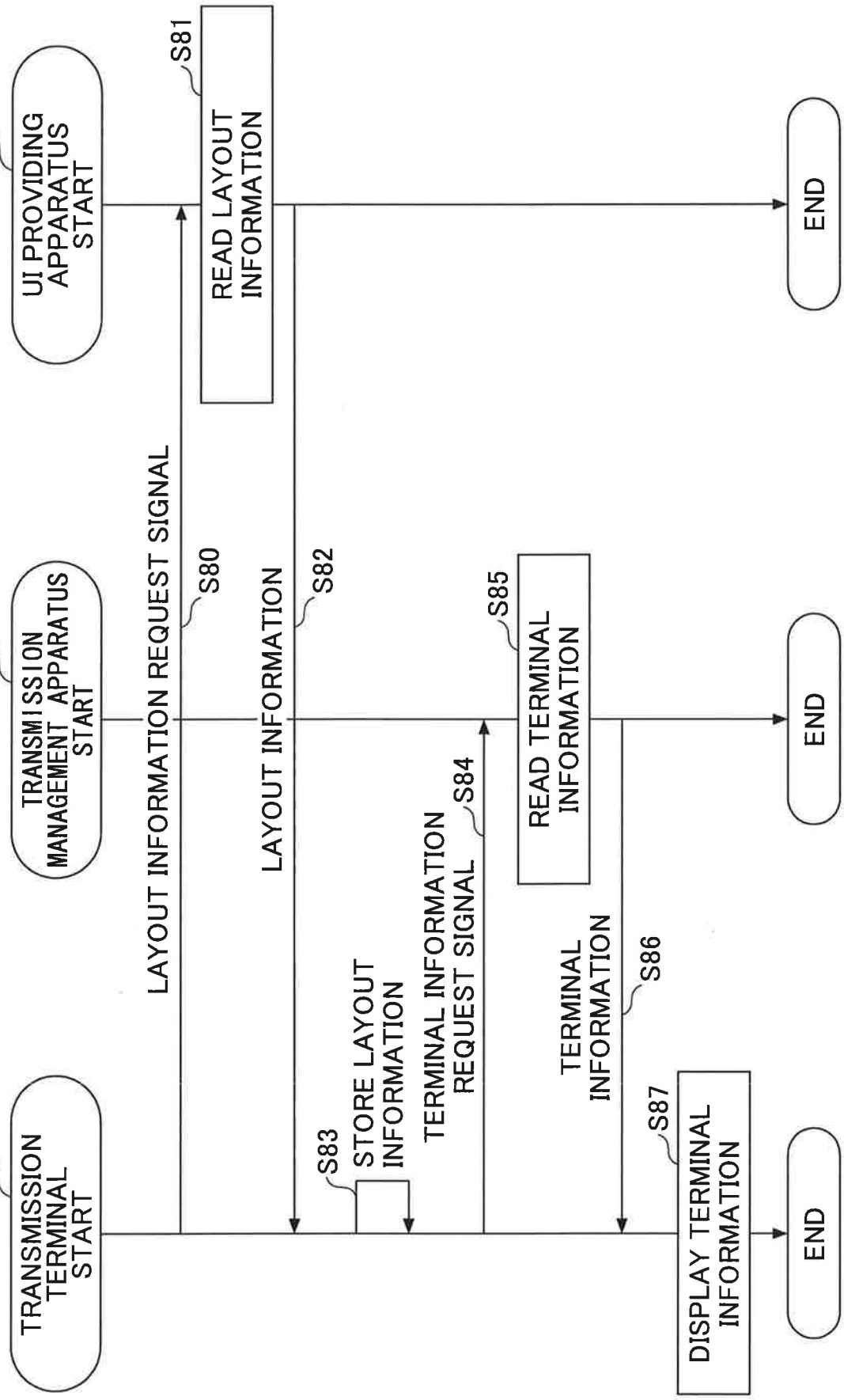

10
TRANSMISSION TERMINAL START
20
UI PROVIDING APPARATUS START
50
TRANSMISSION MANAGEMENT APPARATUS START
LAYOUT INFORMATION REQUEST SIGNAL
S80
S81
READ LAYOUT INFORMATION
LAYOUT INFORMATION
S82
S83
STORE LAYOUT INFORMATION
TERMINAL INFORMATION REQUEST SIGNAL
S84
S85
READ TERMINAL INFORMATION
TERMINAL INFORMATION
S86
S87
DISPLAY TERMINAL INFORMATION
END
END
END

FIG.22

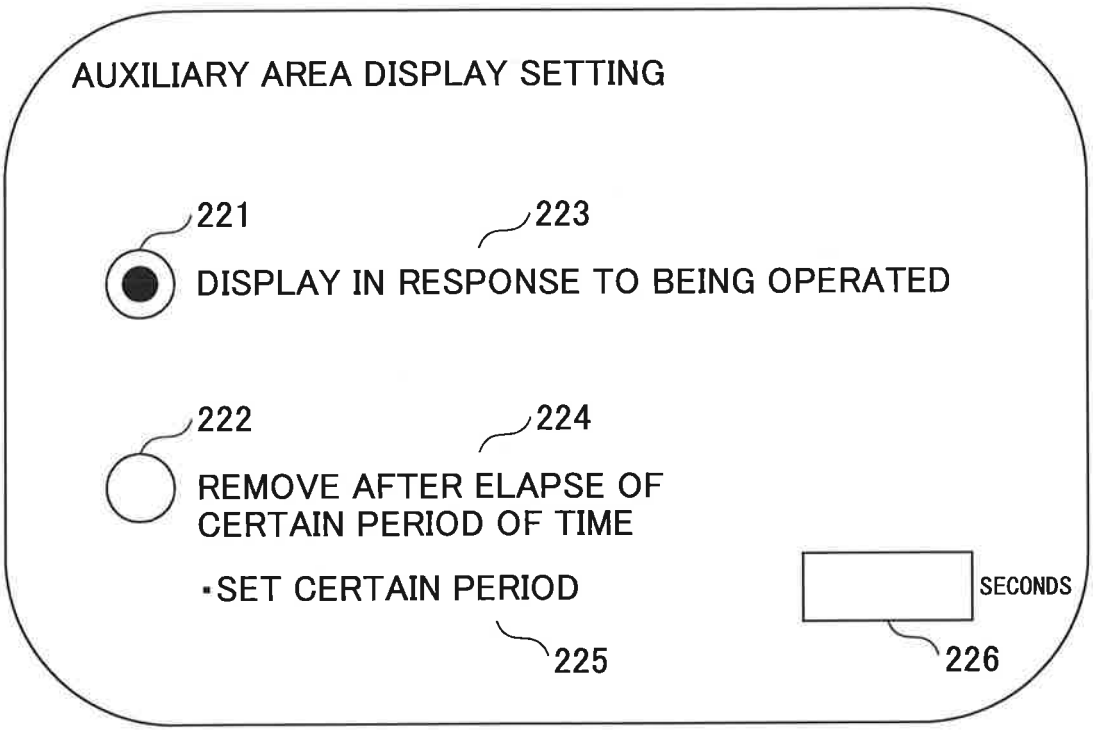

AUXILIARY AREA DISPLAY SETTING
221
223
DISPLAY IN RESPONSE TO BEING OPERATED
222
224
REMOVE AFTER ELAPSE OF CERTAIN PERIOD OF TIME
・SET CERTAIN PERIOD
SECONDS
225
226

FIG.23

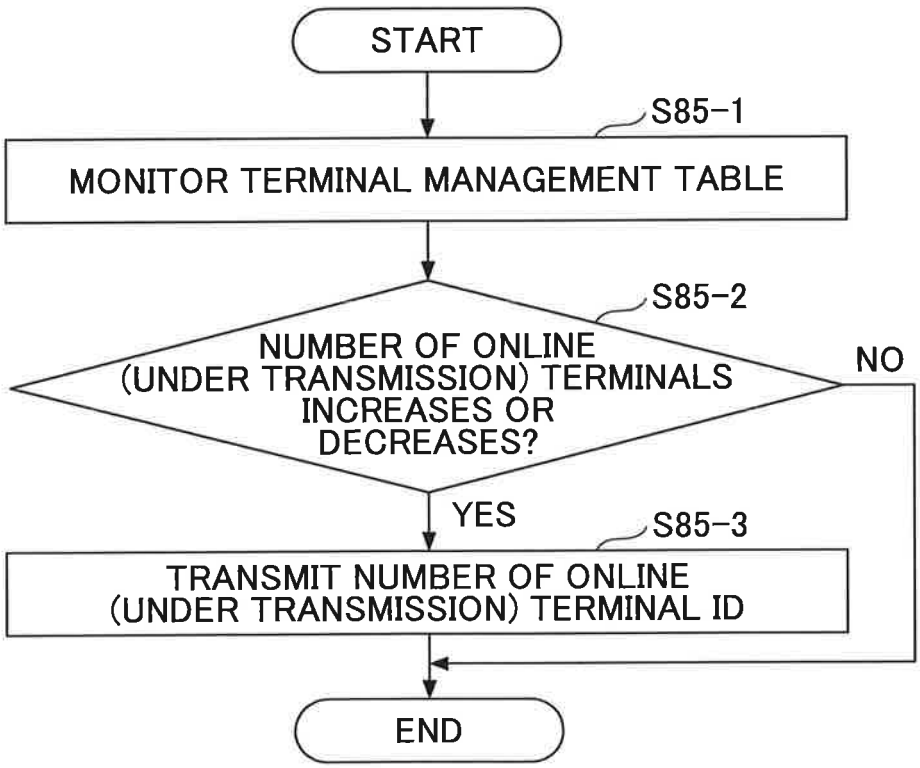

START
S85-1
MONITOR TERMINAL MANAGEMENT TABLE
S85-2
NUMBER OF ONLINE (UNDER TRANSMISSION) TERMINALS INCREASES OR DECREASES?
NO
YES
S85-3
TRANSMIT NUMBER OF ONLINE (UNDER TRANSMISSION) TERMINAL ID
END

FIG.24

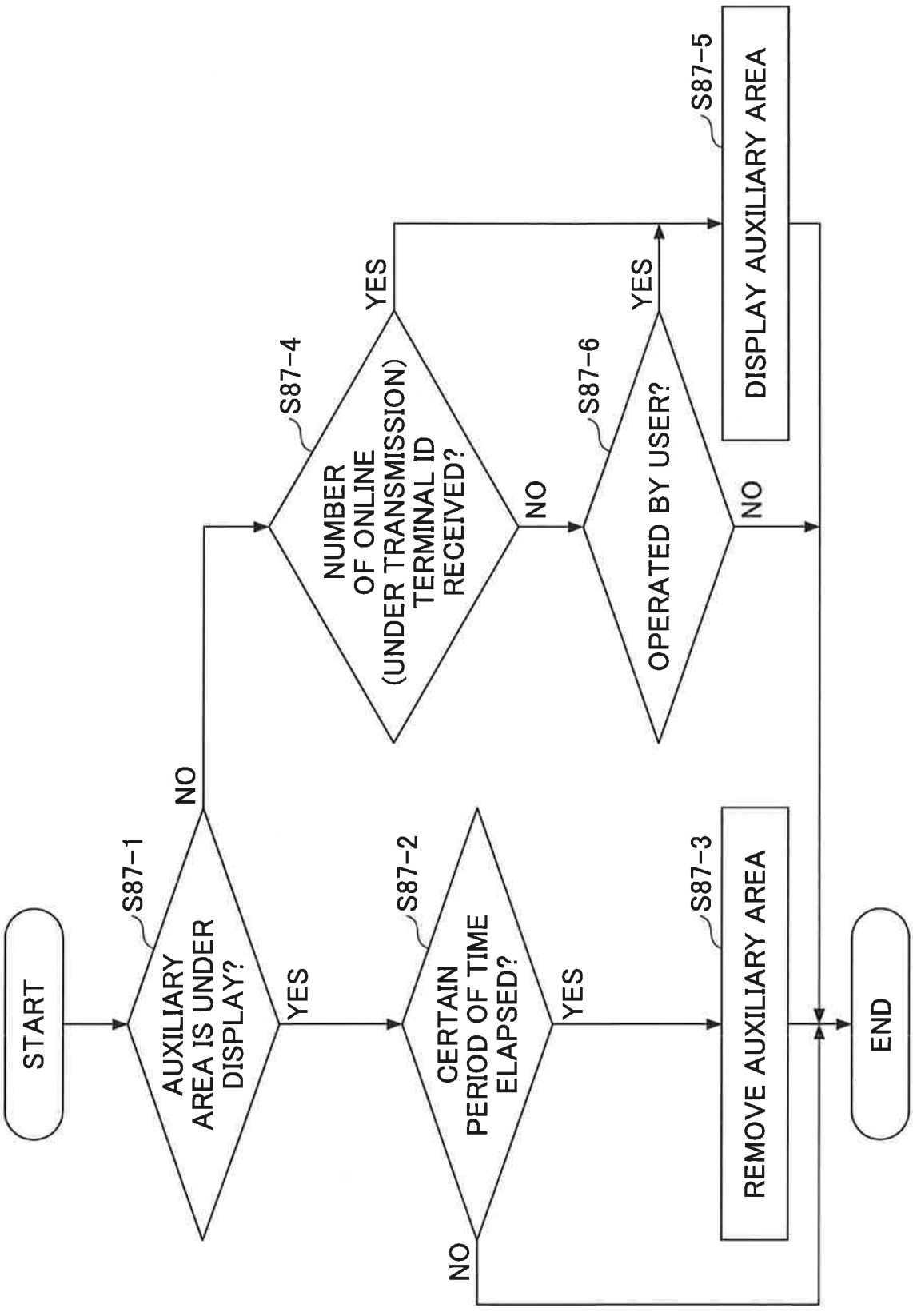

START
S87-1
AUXILIARY AREA IS UNDER DISPLAY?
NO
YES
S87-2
CERTAIN PERIOD OF TIME ELAPSED?
NO
YES
S87-3
REMOVE AUXILIARY AREA
S87-4
NUMBER OF ONLINE (UNDER TRANSMISSION) TERMINAL ID RECEIVED?
YES
NO
S87-6
OPERATED BY USER?
YES
NO
S87-5
DISPLAY AUXILIARY AREA
END

FIG.25

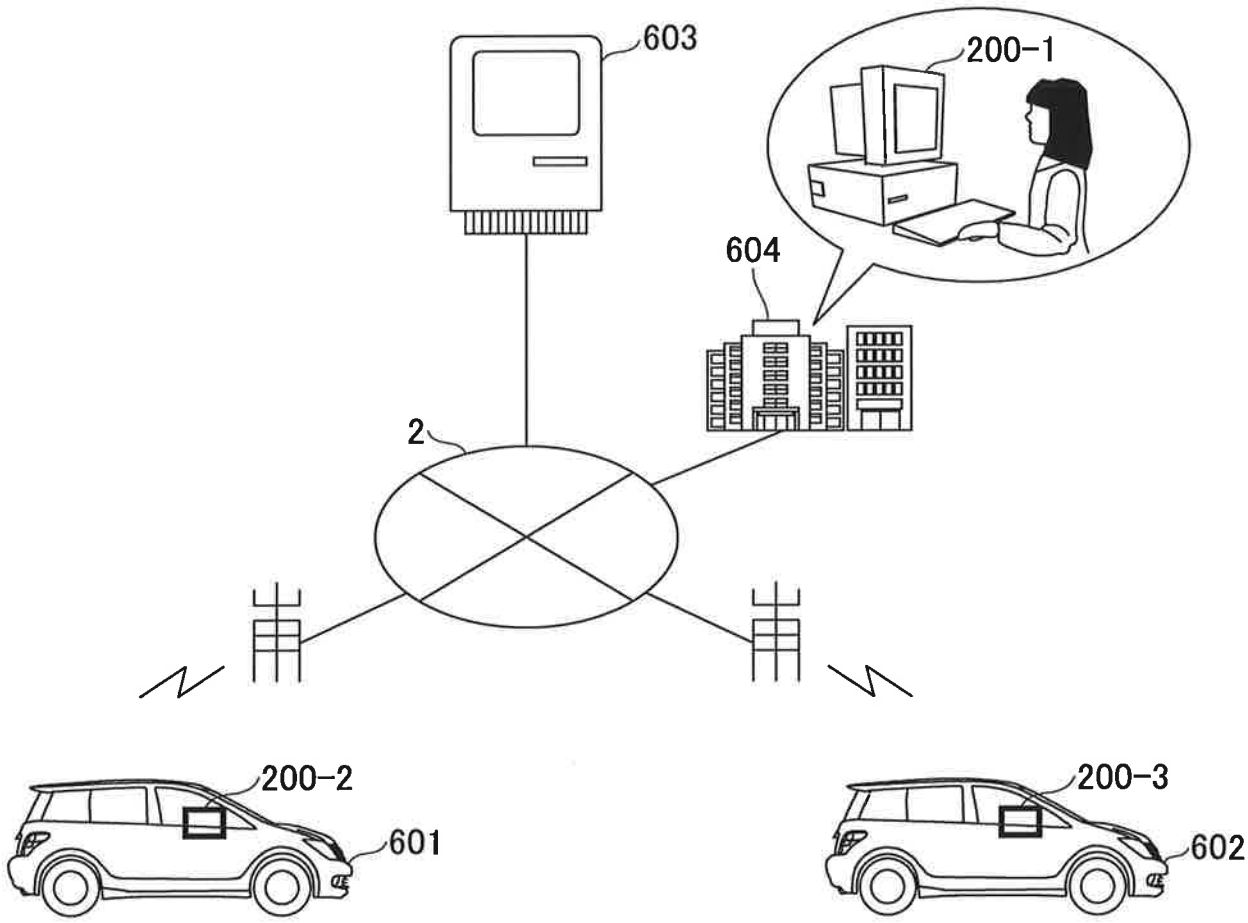


FIG.26

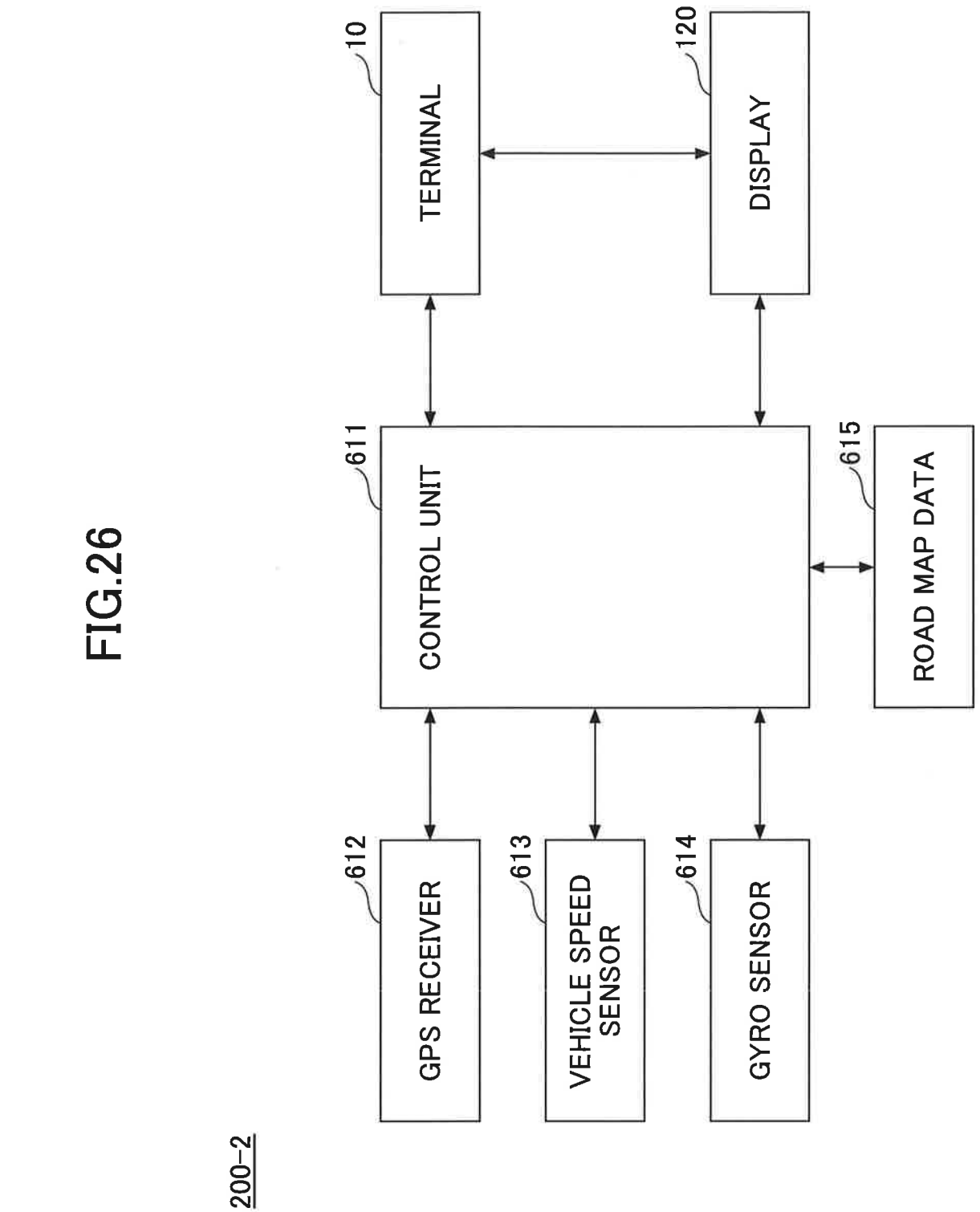
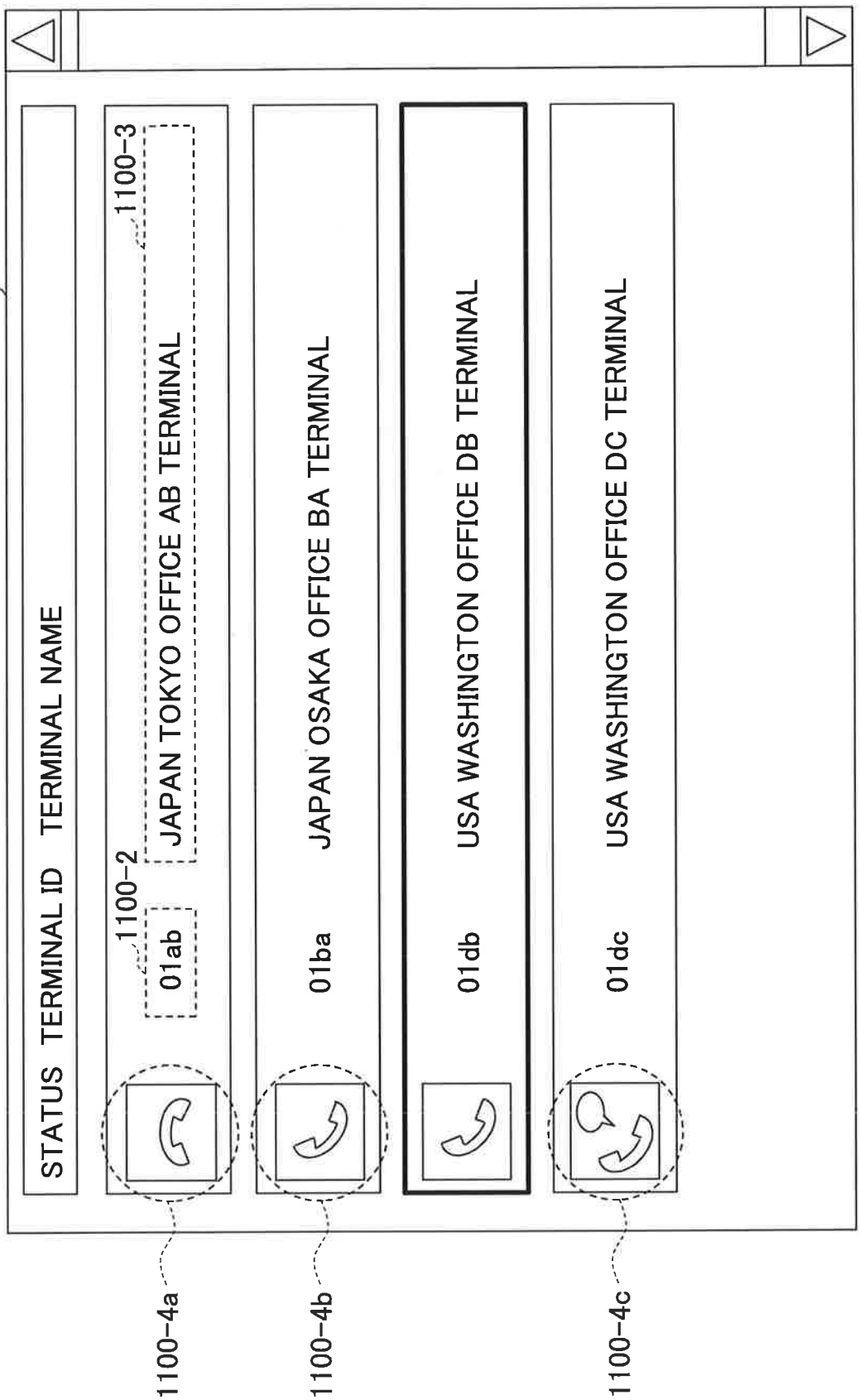

200-2
10
TERMINAL
120
DISPLAY
611
CONTROL UNIT
615
ROAD MAP DATA
612
GPS RECEIVER
613
VEHICLE SPEED SENSOR
614
GYRO SENSOR

FIG.27


1100-1
STATUS
TERMINAL ID
TERMINAL NAME
1100-2
1100-3
01ab
JAPAN TOKYO OFFICE AB TERMINAL
01ba
JAPAN OSAKA OFFICE BA TERMINAL
01db
USA WASHINGTON OFFICE DB TERMINAL
01dc
USA WASHINGTON OFFICE DC TERMINAL
1100-4a
1100-4b
1100-4c