

FIG. 1

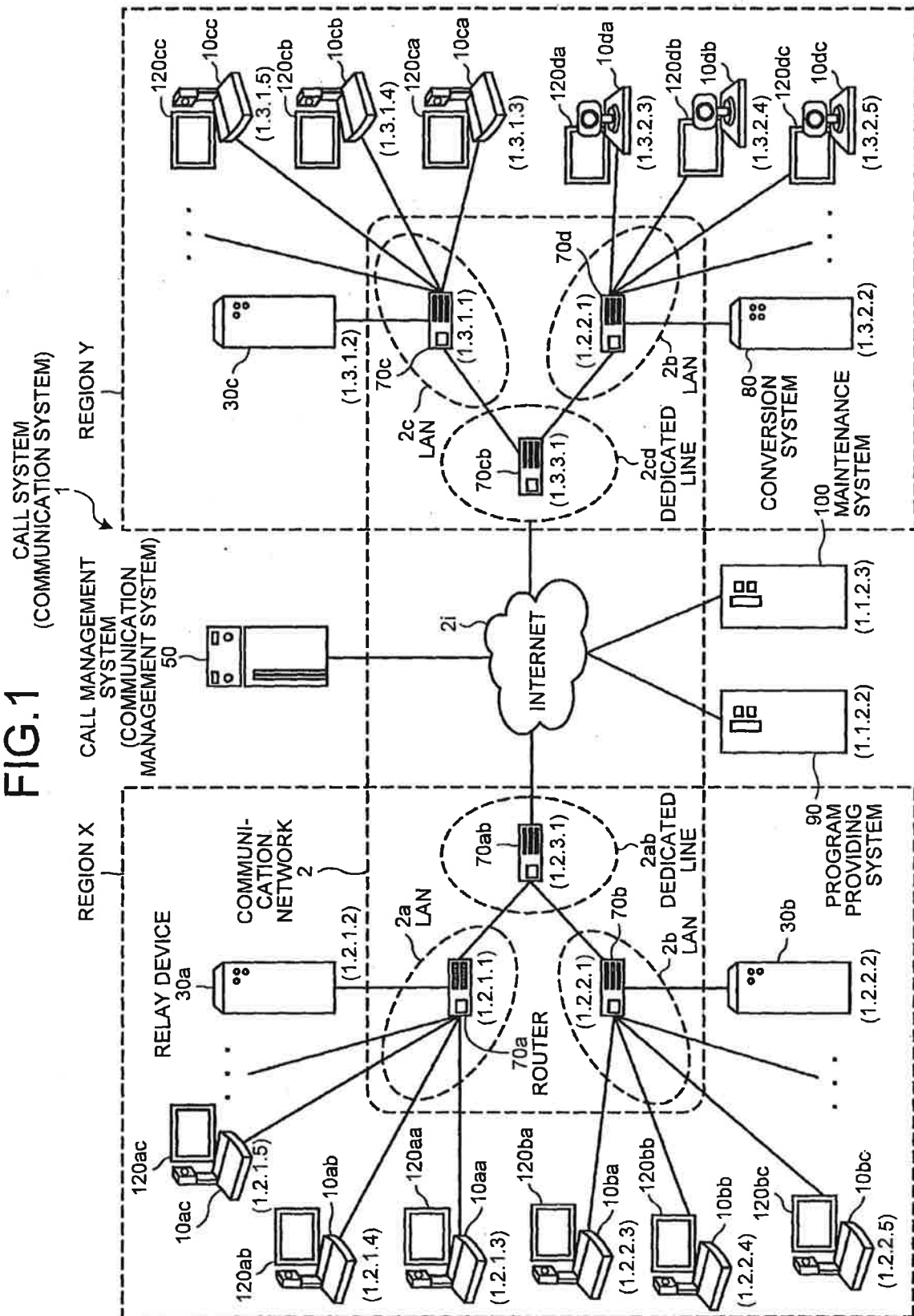


FIG.2

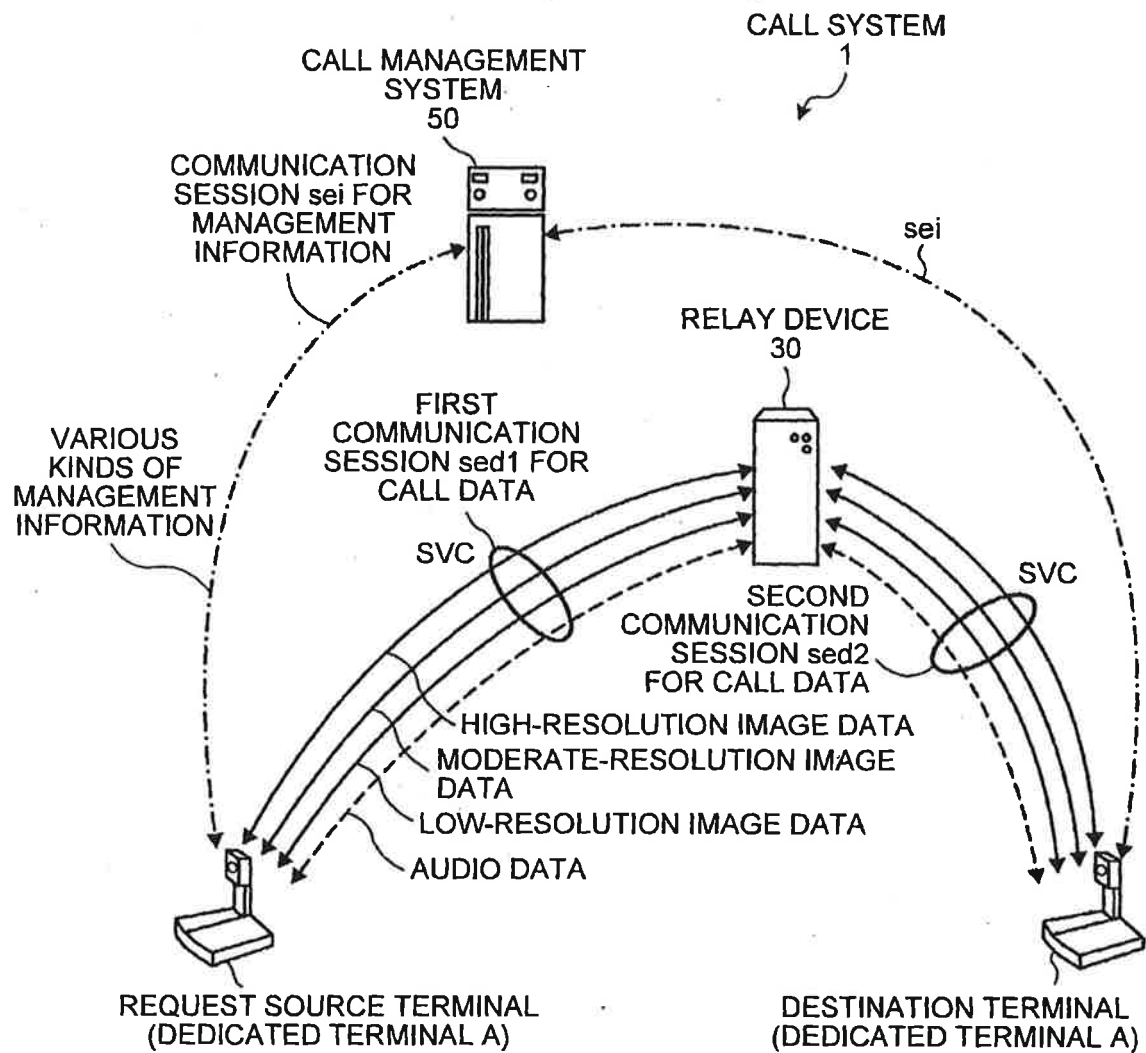


FIG.3

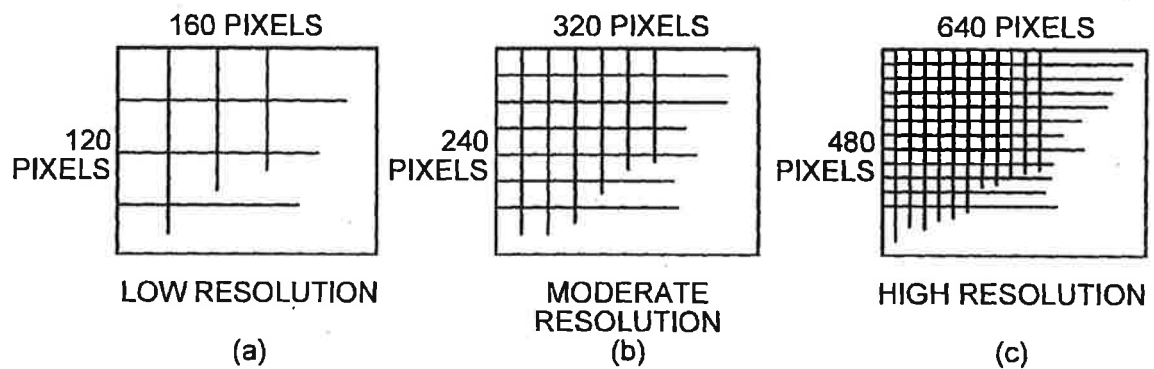


FIG.4

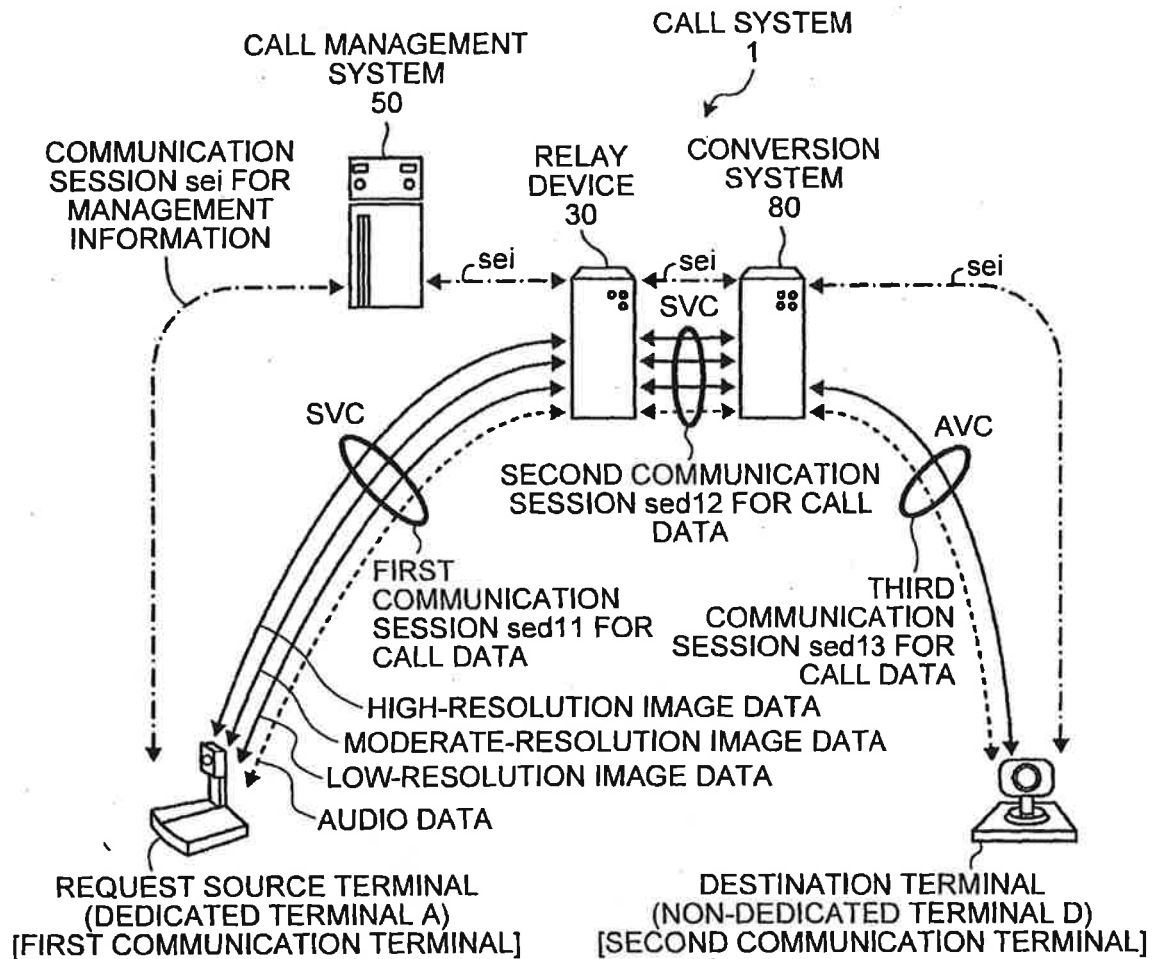


FIG.5

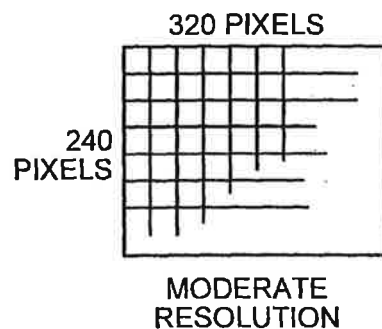
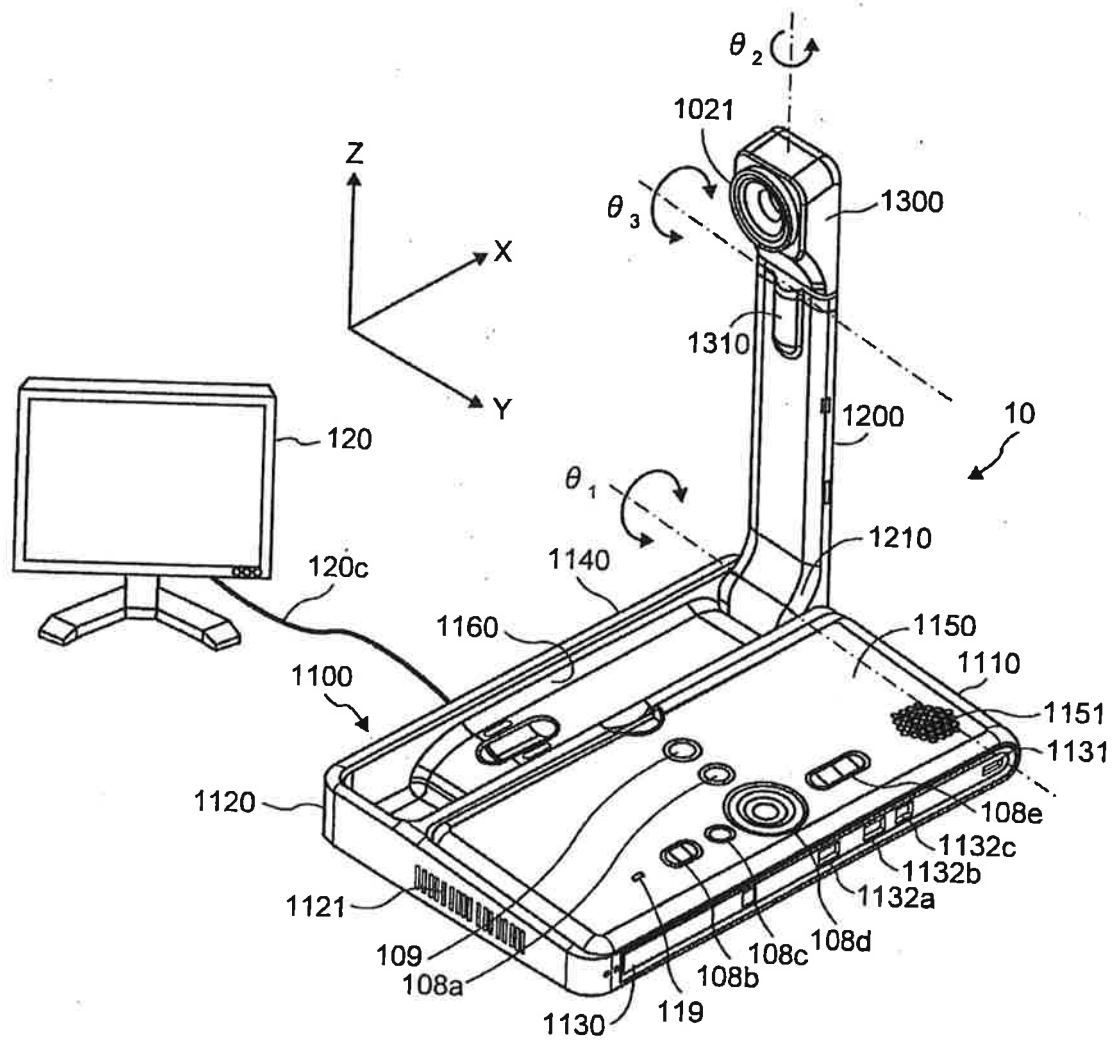


FIG.6



5/18

FIG.7

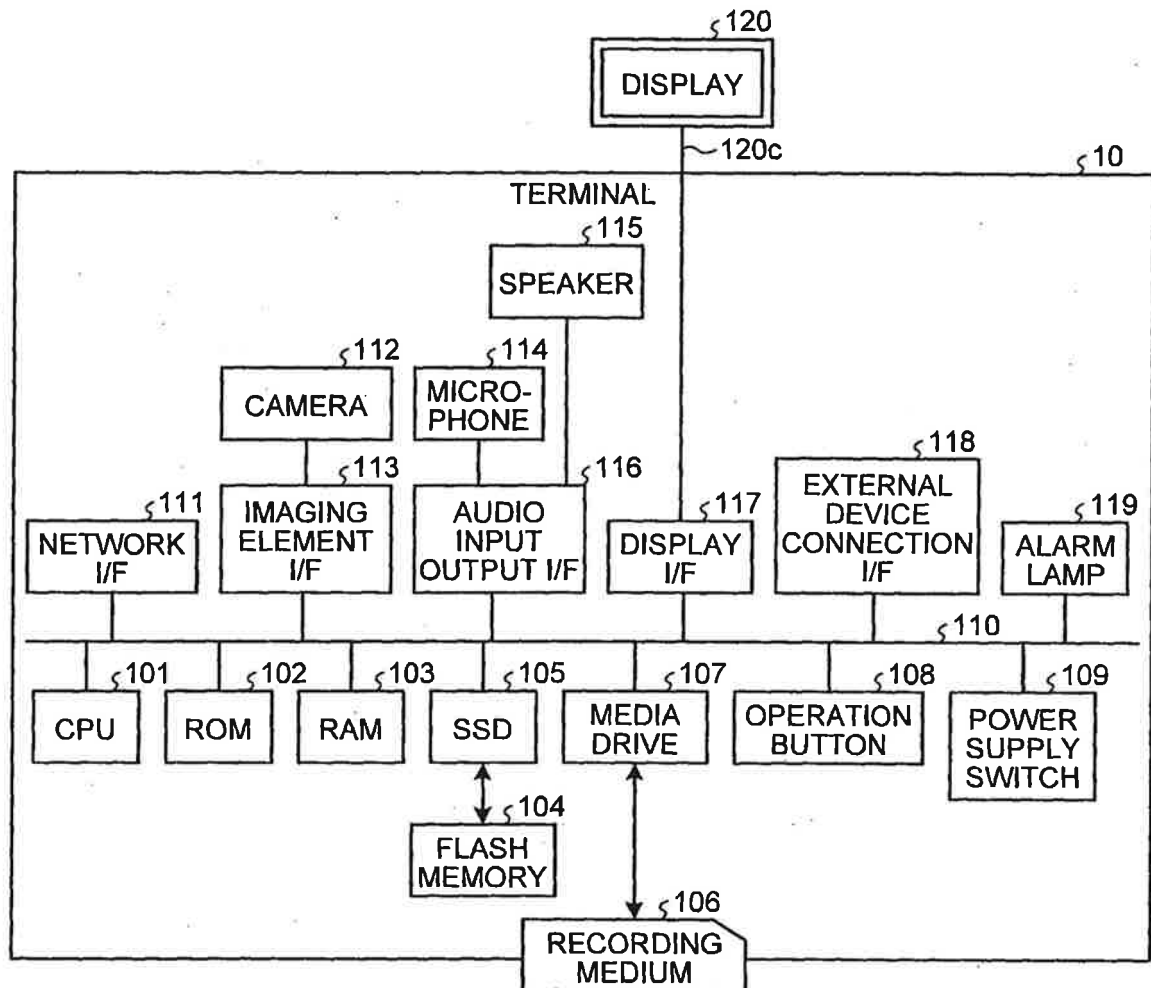
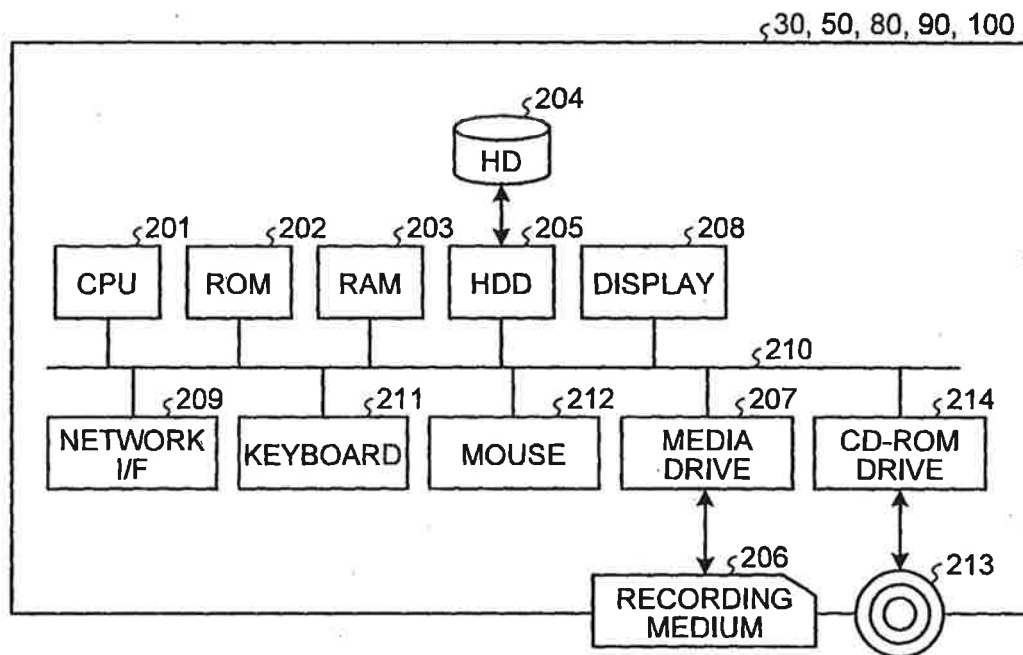


FIG. 8



7/18

FIG. 9

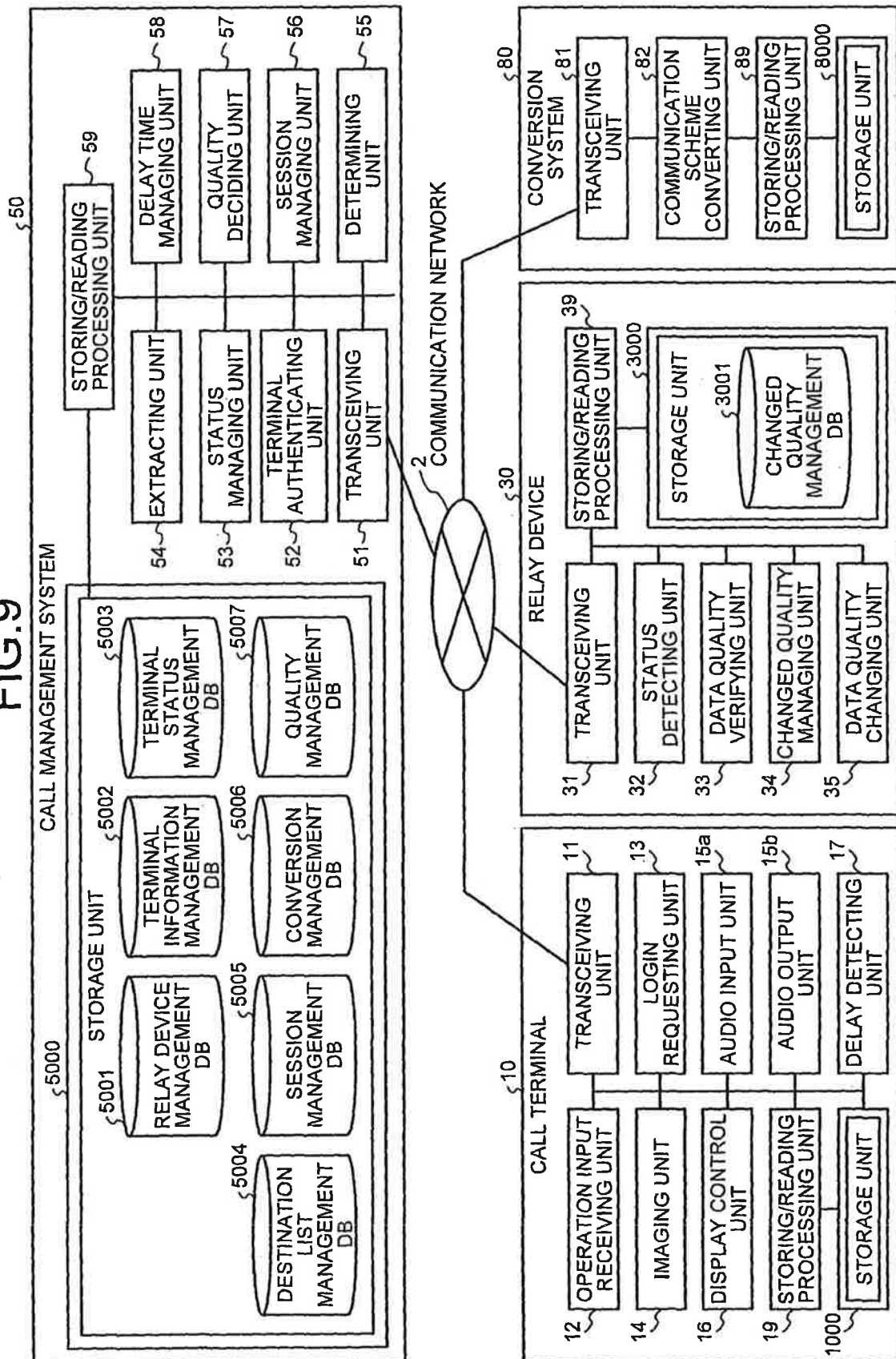


FIG.10

CHANGED QUALITY MANAGEMENT TABLE

IP ADDRESS OF RELAY DESTINATION TERMINAL	IMAGE QUALITY OF IMAGE DATA TO BE RELAYED (QUALITY OF IMAGE)
1.3.1.4	HIGH IMAGE QUALITY
1.3.1.3	HIGH IMAGE QUALITY
1.2.2.3	MODERATE IMAGE QUALITY
...	...

FIG.11

RELAY DEVICE MANAGEMENT TABLE

RELAY DEVICE ID	OPERATION STATUS	RECEPTION DATE AND TIME	IP ADDRESS OF RELAY DEVICE	MAXIMUM DATA CALL RATE (Mbps)
111a	ONLINE	2011.11.10.13:00	1.2.1.2	100
111b	ONLINE	2011.11.10.13:10	1.2.2.2	1000
111c	ONLINE	2011.11.10.13:20	1.3.1.2	10

FIG.12

TERMINAL INFORMATION MANAGEMENT TABLE

TERMINAL ID	PASSWORD	MODEL NO.	SERIAL NO.	COMMUNICATION SCHEME
01aa	aaaa	9001	2001	DEDICATED
01ab	abab	9001	2002	DEDICATED
01ac	acac	9001	2003	DEDICATED
...	...	...	...	...
01da	dada	8001	1001	NON-DEDICATED 1
01db	dbdb	8001	1002	NON-DEDICATED 2
01dc	dcdc	8001	1003	NON-DEDICATED 1
...	...	...	...	...

FIG.13

TERMINAL STATUS MANAGEMENT TABLE

TERMINAL ID	TERMINAL NAME	OPERATION STATUS	RECEPTION DATE AND TIME	IP ADDRESS OF TERMINAL
01aa	AA TERMINAL OF TOKYO BUSINESS OFFICE IN JAPAN	ONLINE (CALL POSSIBLE)	2011.11.10. 13:40	1.2.1.3
01ab	AA TERMINAL OF TOKYO BUSINESS OFFICE IN JAPAN	OFFLINE	2011.11.9. 12:00	1.2.1.4
...	...	...	...	...
01ba	BA TERMINAL OF OSAKA BUSINESS OFFICE IN JAPAN	ONLINE (TEMPORARY STOP)	2011.11.10. 13:45	1.2.2.3
01bb	BB TERMINAL OF OSAKA BUSINESS OFFICE IN JAPAN	ONLINE (CALL POSSIBLE)	2011.11.10. 13:50	1.2.2.4
...	...	...	...	...
01ca	CA TERMINAL OF NEW YORK BUSINESS OFFICE IN AMERICA	ONLINE (CALL POSSIBLE)	2011.11.10. 12:45	1.3.1.3
01cb	CB TERMINAL OF NEW YORK BUSINESS OFFICE IN AMERICA	ONLINE (BUSY)	2011.11.10. 13:55	1.3.1.4
...	...	...	...	...
01da	DA TERMINAL OF WASHINGTON BUSINESS OFFICE IN AMERICA			
01db	DB TERMINAL OF WASHINGTON BUSINESS OFFICE IN AMERICA			
...	...			

10/18

FIG.14

DESTINATION LIST MANAGEMENT TABLE

REQUEST SOURCE TERMINAL ID	DESTINATION TERMINAL ID
01aa	01ab, ..., 01ba, 01bb, ..., 01ca, 01cb, 01da, 01db
...	...
01ba	01aa, 01ab, 01ca, 01cb, 01da, 01db
...	...
01ca	01aa, 01ab, 01ba, ..., 01da,
...	...
01da	01aa, ...
...	...

FIG.15

SESSION MANAGEMENT TABLE

RELAY DEVICE ID	REQUEST SOURCE TERMINAL ID	DESTINATION TERMINAL ID	DELAY TIME (ms)	RECEPTION DATE AND TIME OF DELAY INFORMATION
111a	01aa	01ca	200	2011.11.10.14:00
111b	01ba	01cb	50	2011.11.10.14:10
111c	01bb	01cc	400	2011.11.10.14:20
...	...	...	...	...

11/18

FIG.16

CONVERSION MANAGEMENT TABLE

TERMINAL ID OF NON-DEDICATED TERMINAL	IP ADDRESS OF CONVERSION SYSTEM	IP ADDRESS OF NO-DEDICATED TERMINAL
01da	1.3.2.2	1.3.2.3
01db	1.3.2.2	1.3.2.4
01dc	1.3.2.2	1.3.2.5
...	...	...

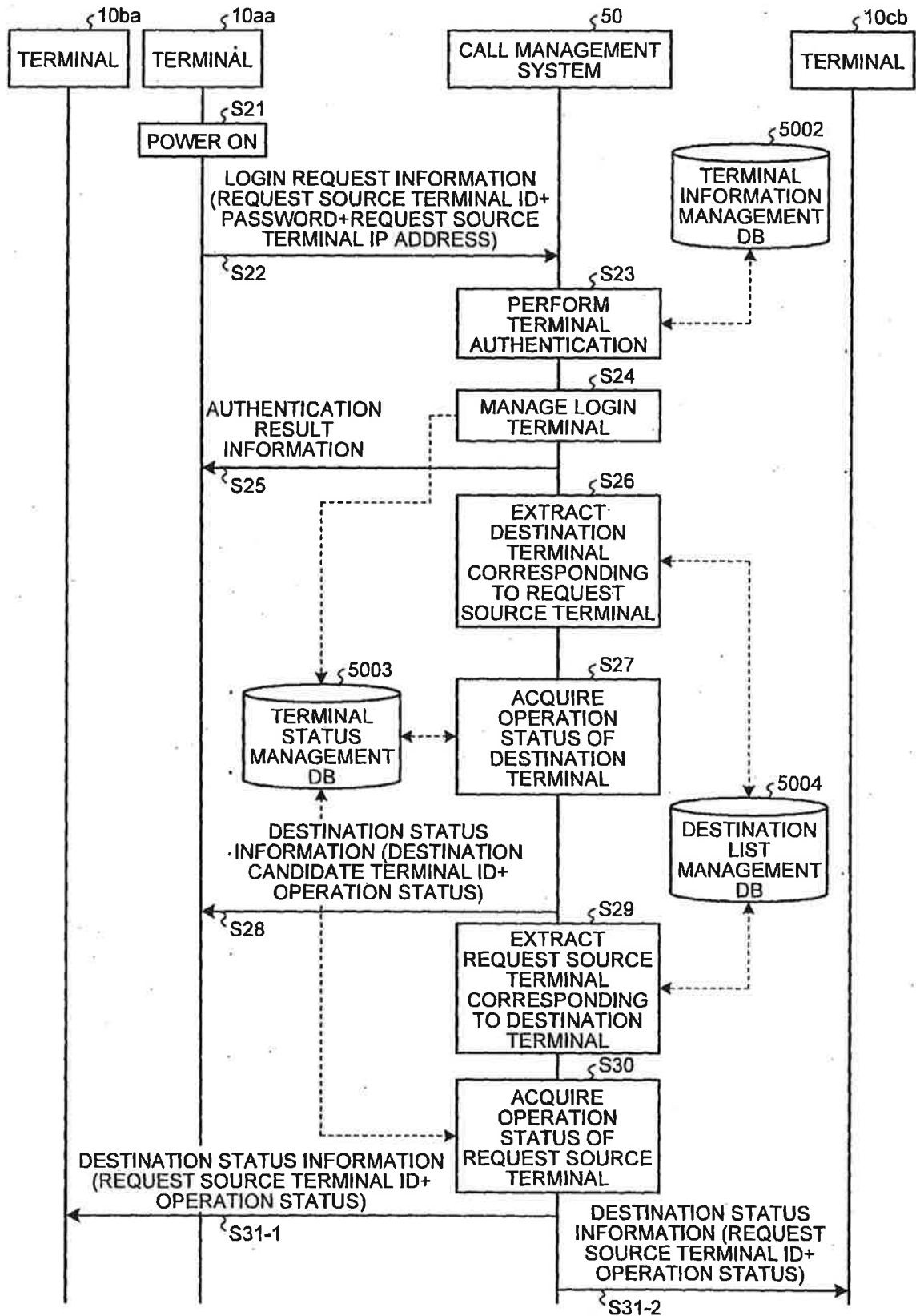
FIG.17

QUALITY MANAGEMENT TABLE

DELAY TIME (ms)	IMAGE QUALITY OF IMAGE DATA (QUALITY OF IMAGE)
0 TO 100	HIGH IMAGE QUALITY
100 TO 300	MODERATE IMAGE QUALITY
300 TO 500	LOW IMAGE QUALITY
500 TO	(INTERRUPTION)

12/18

FIG.18



13/18

FIG.19

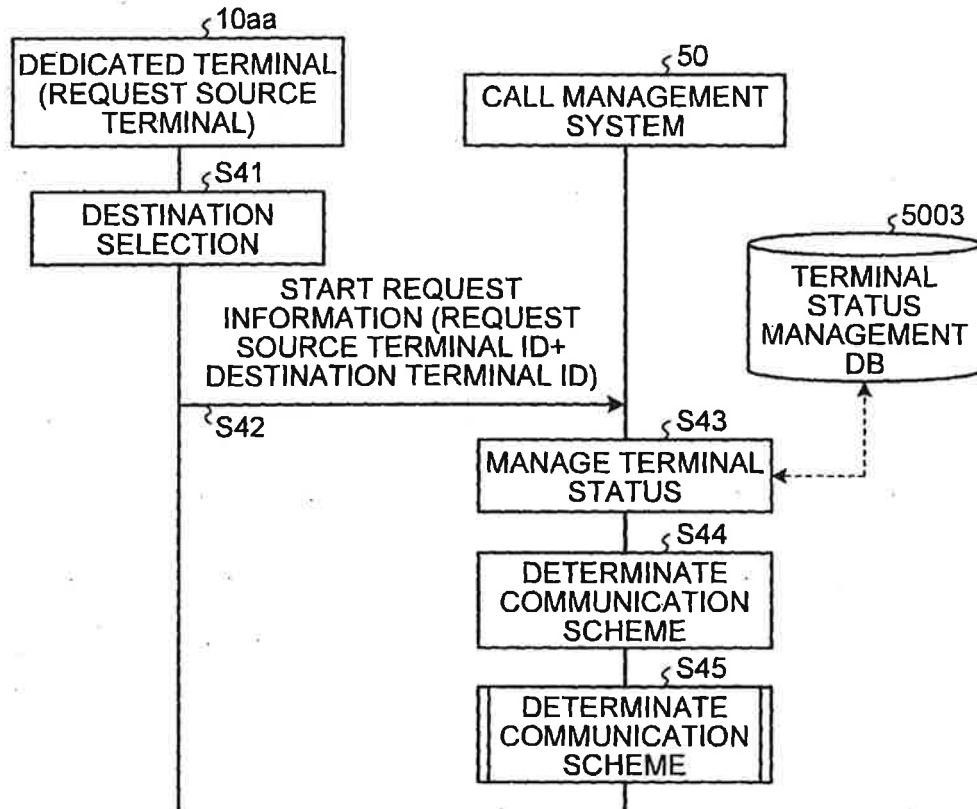


FIG.20

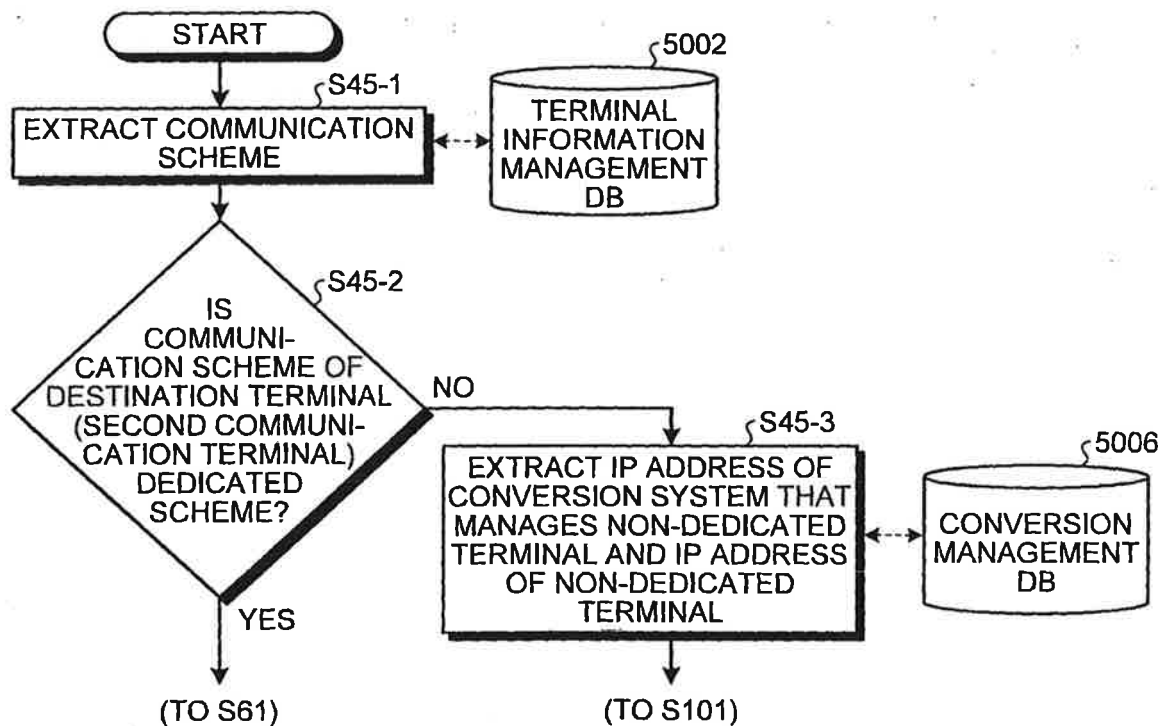


FIG.21

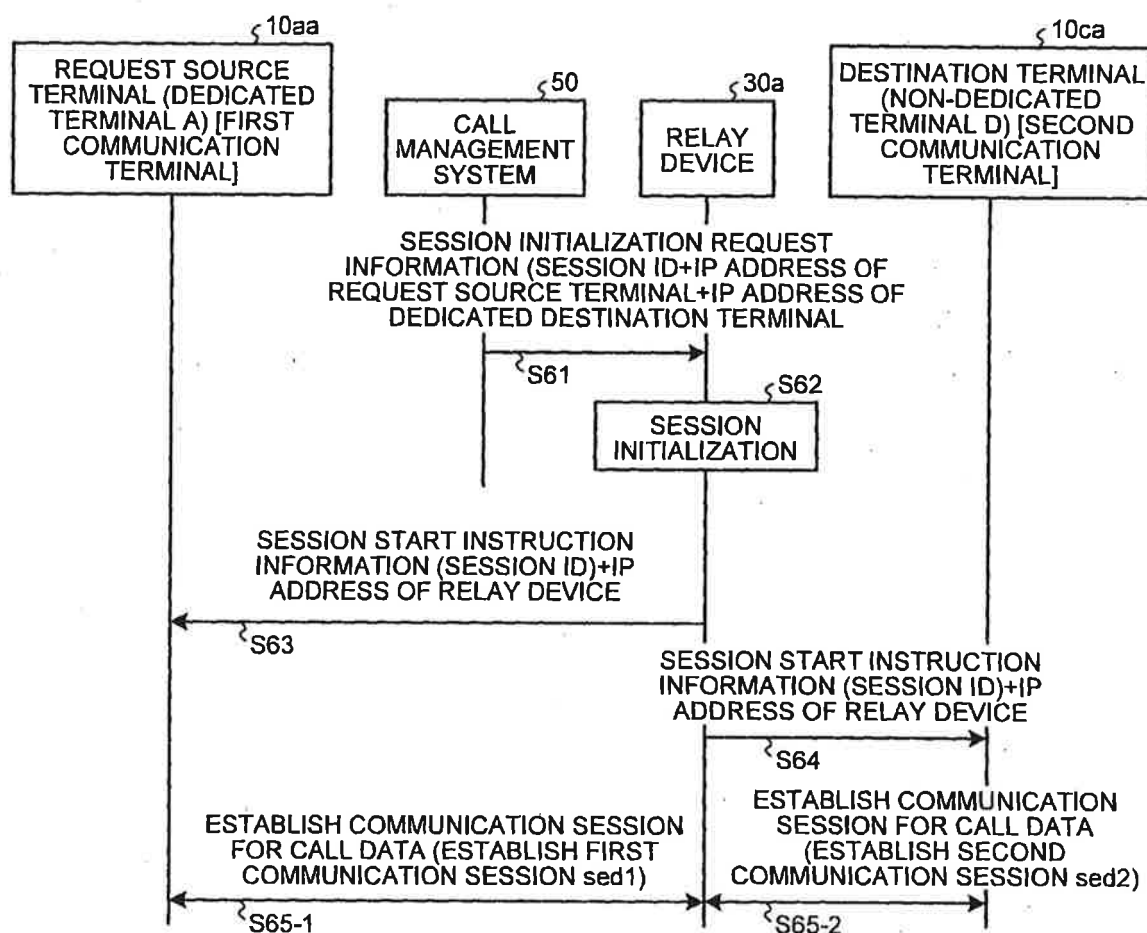
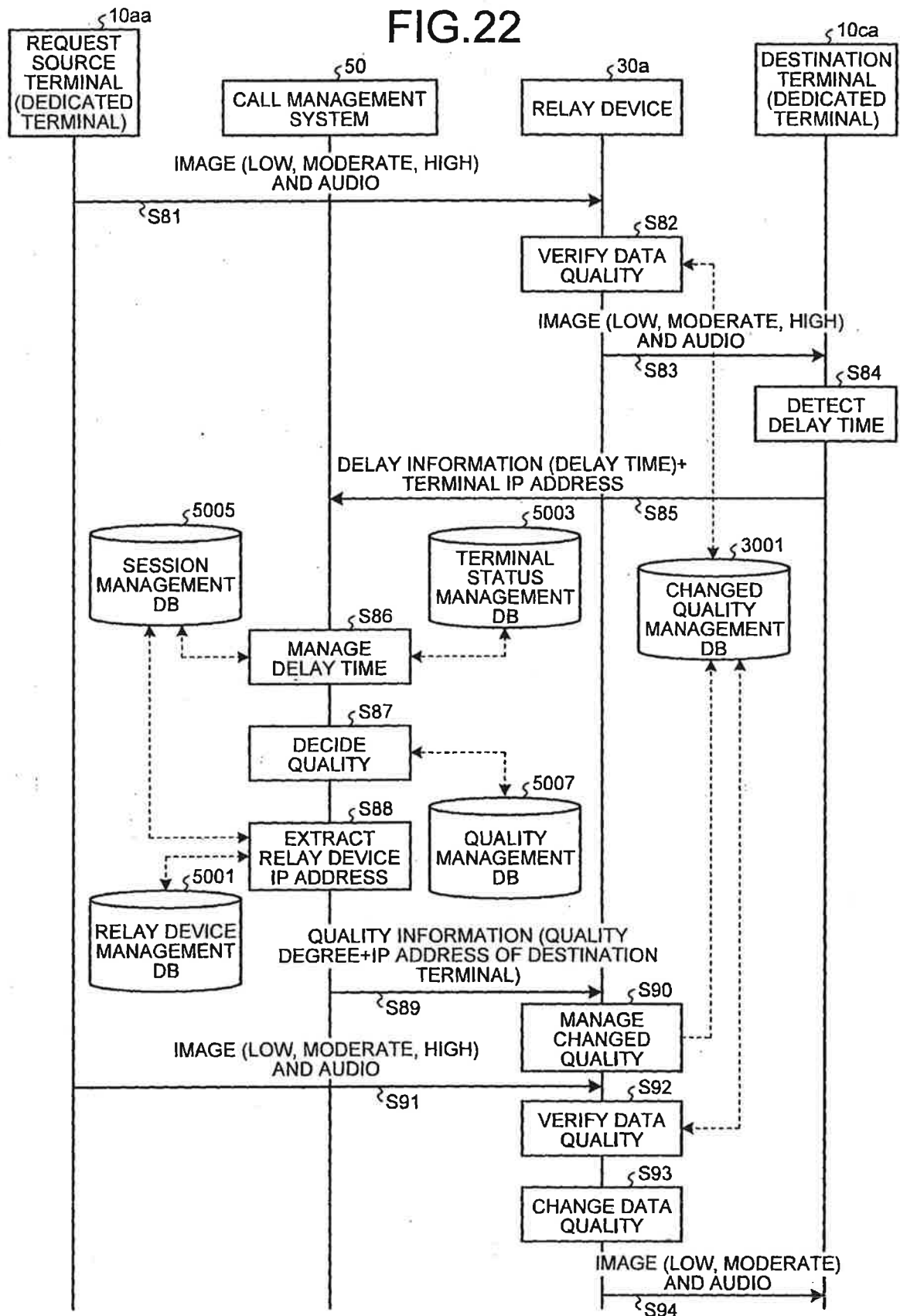


FIG.22



Sequence Diagram 10da: Session Establishment Process

Participants:

- 10daa REQUEST SOURCE TERMINAL (DEDICATED TERMINAL A) [FIRST COMMUNICATION TERMINAL]**
- 50 CALL MANAGEMENT SYSTEM**
- 30a RELAY DEVICE**
- 80 CONVERSION SYSTEM**
- 10db DESTINATION TERMINAL (NON-DEDICATED TERMINAL D) [SECOND COMMUNICATION TERMINAL]**

Sequence of Messages:

- 10daa** → **50**: SESSION INITIALIZATION REQUEST INFORMATION (SESSION ID+IP ADDRESS OF REQUEST SOURCE TERMINAL+ IP ADDRESS OF CONVERSION SYSTEM+ IP ADDRESS OF NON-DEDICATED DESTINATION TERMINAL)+ IP ADDRESS OF MANAGEMENT SYSTEM
- 50** → **30a**: **SESSION INITIALIZATION**
- 30a** → **80**: **SESSION START INSTRUCTION INFORMATION (SESSION ID)+ IP ADDRESS OF RELAY DEVICE** (S103)
- 80** → **10db**: **SESSION START INSTRUCTION INFORMATION (SESSION ID)+ IP ADDRESS OF CONVERSION SYSTEM** (S104)
- 10db** → **80**: **ESTABLISH COMMUNICATION SESSION FOR CALL DATA (ESTABLISH FIRST COMMUNICATION SESSION sed11)** (S106-1)
- 80** → **10db**: **ESTABLISH COMMUNICATION SESSION FOR CALL DATA (ESTABLISH SECOND COMMUNICATION SESSION sed12)** (S106-2)
- 10db** → **80**: **ESTABLISH COMMUNICATION SESSION FOR CALL DATA (ESTABLISH THIRD COMMUNICATION SESSION sed13)** (S106-3)

FIG.24

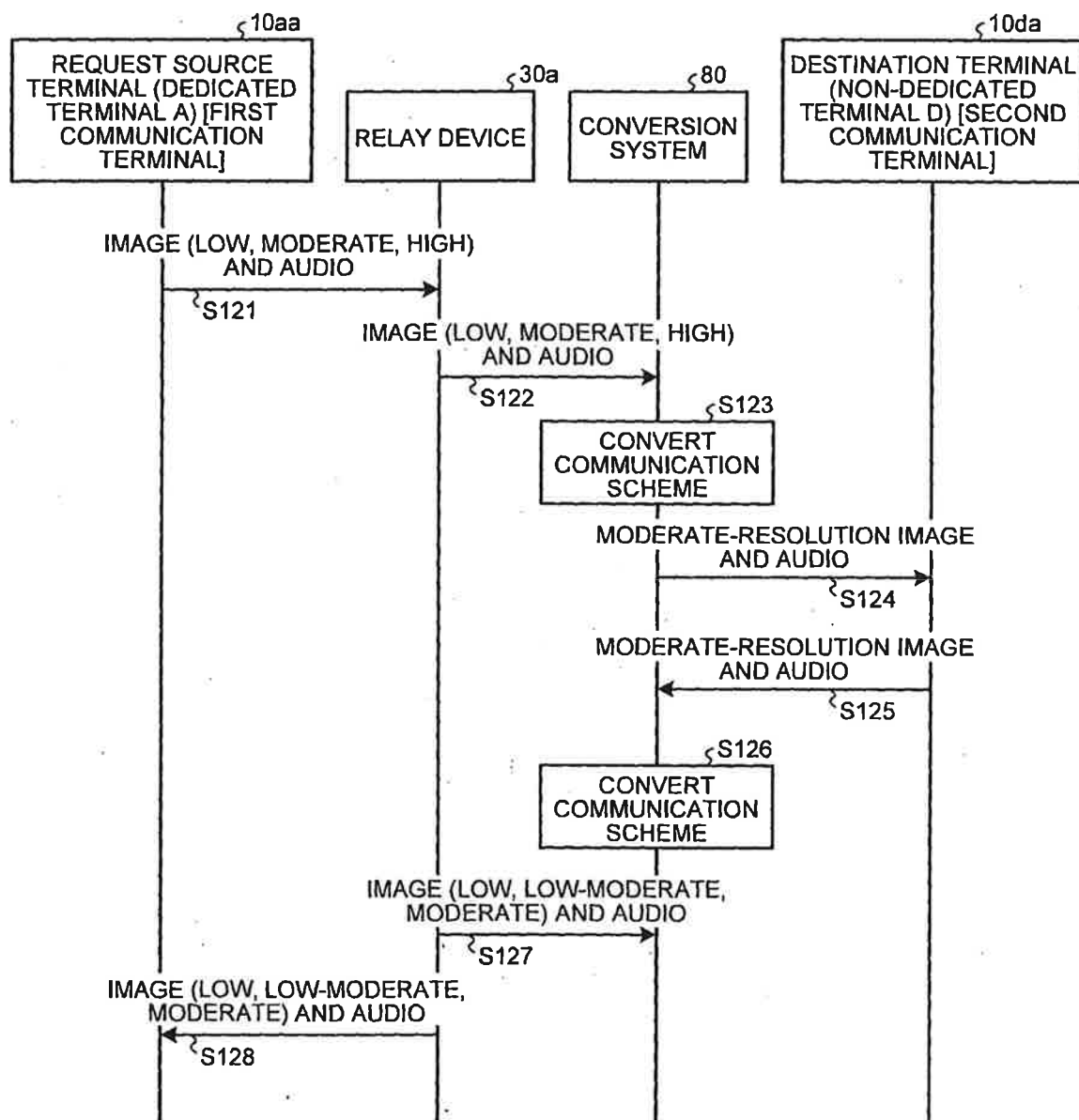


FIG.25

