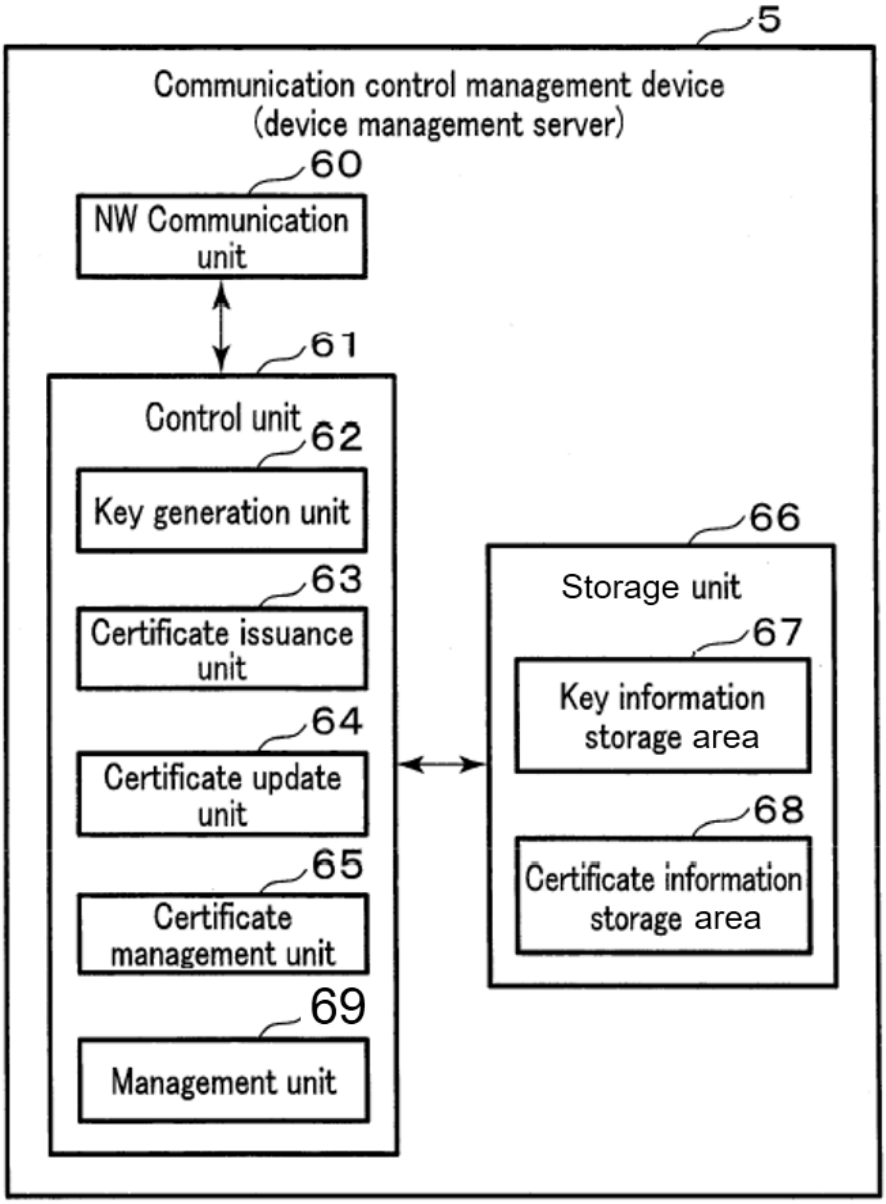

5
Communication control management device
(device management server)
60
NW Communication unit
61
Control unit
62
Key generation unit
63
Certificate issuance unit
64
Certificate update unit
65
Certificate management unit
69
Management unit
66
Storage unit
67
Key information storage area
68
Certificate information storage area

FIG. 6

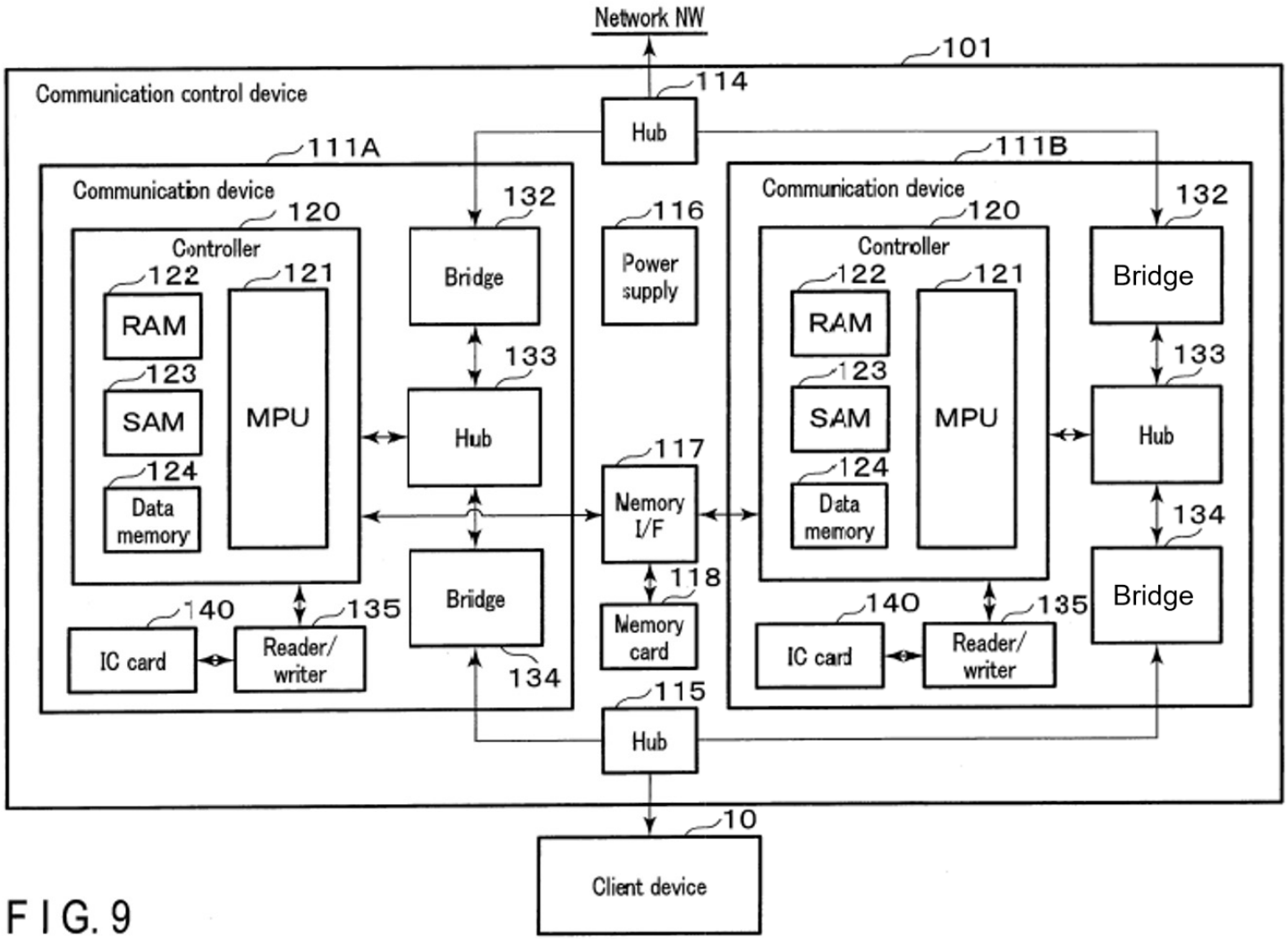

Network NW
101
Communication control device
114
Hub
111A
111B
Communication device
Communication device
120
132
116
120
132
Controller
Bridge
Power supply
Controller
Bridge
122
121
122
121
RAM
MPU
RAM
MPU
133
123
123
133
SAM
SAM
Hub
Hub
124
117
124
Data memory
Memory I/F
Data memory
134
118
Bridge
Bridge
140
135
140
135
Memory card
IC card
Reader/ writer
IC card
Reader/ writer
134
115
Hub
10
Client device

FIG. 9

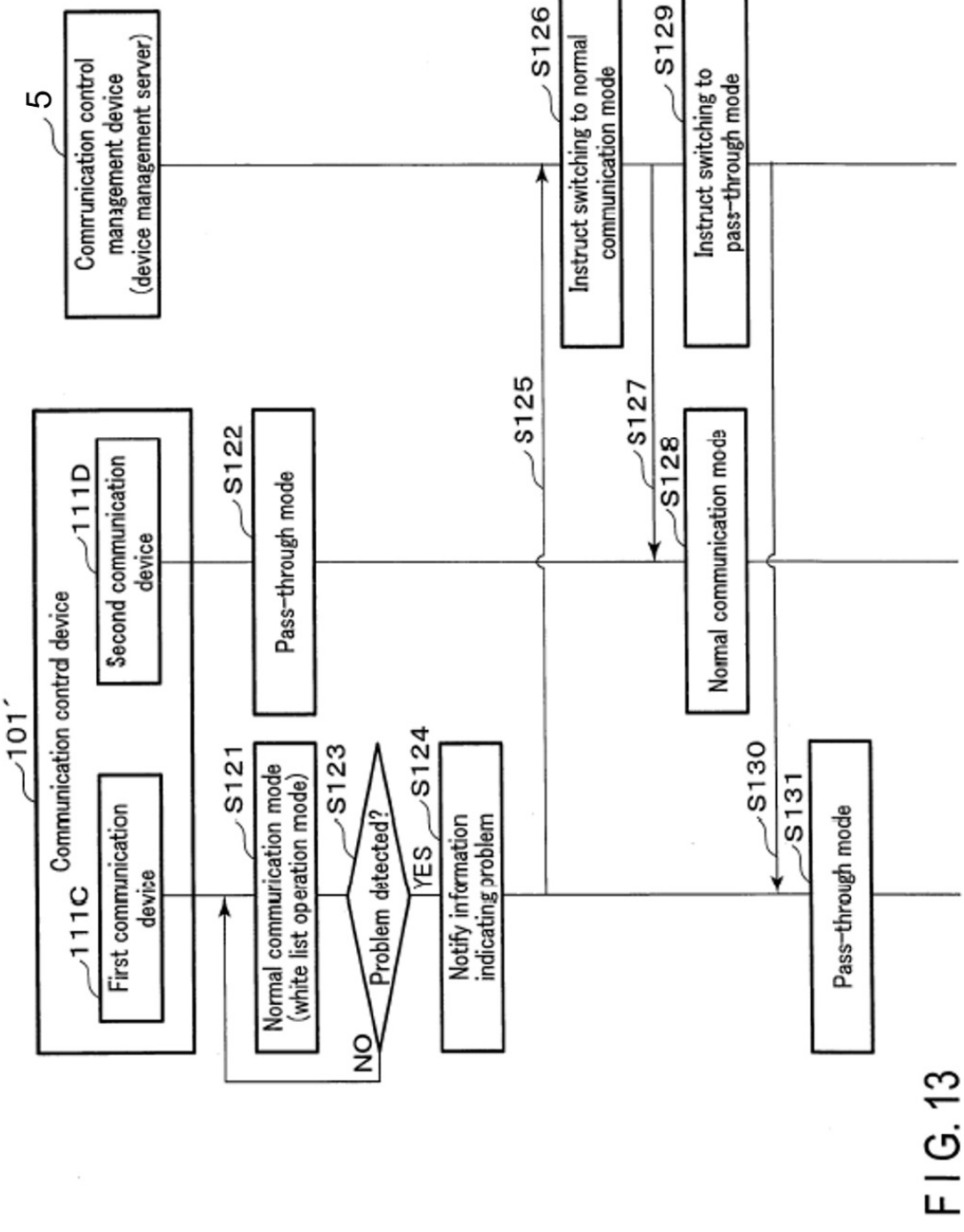

5
Communication control management device (device management server)
101'
Communication control device
111C
First communication device
111D
Second communication device
S121
Normal communication mode (white list operation mode)
S122
Pass-through mode
S123
Problem detected?
NO
YES
S124
Notify information indicating problem
S125
S126
Instruct switching to normal communication mode
S127
S128
Normal communication mode
S129
Instruct switching to pass-through mode
S130
S131
Pass-through mode

FIG. 13

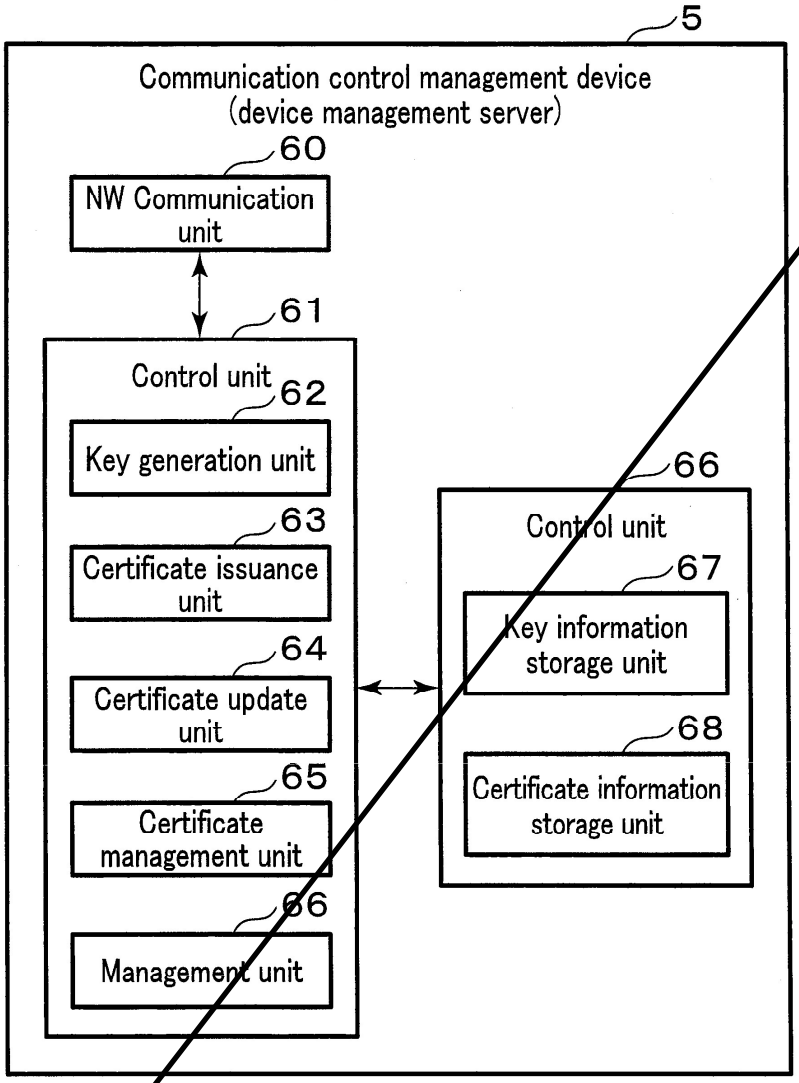

5
Communication control management device
(device management server)
60
NW Communication unit
61
Control unit
62
Key generation unit
63
Certificate issuance unit
64
Certificate update unit
65
Certificate management unit
66
Management unit
66
Control unit
67
Key information storage unit
68
Certificate information storage unit

FIG. 6

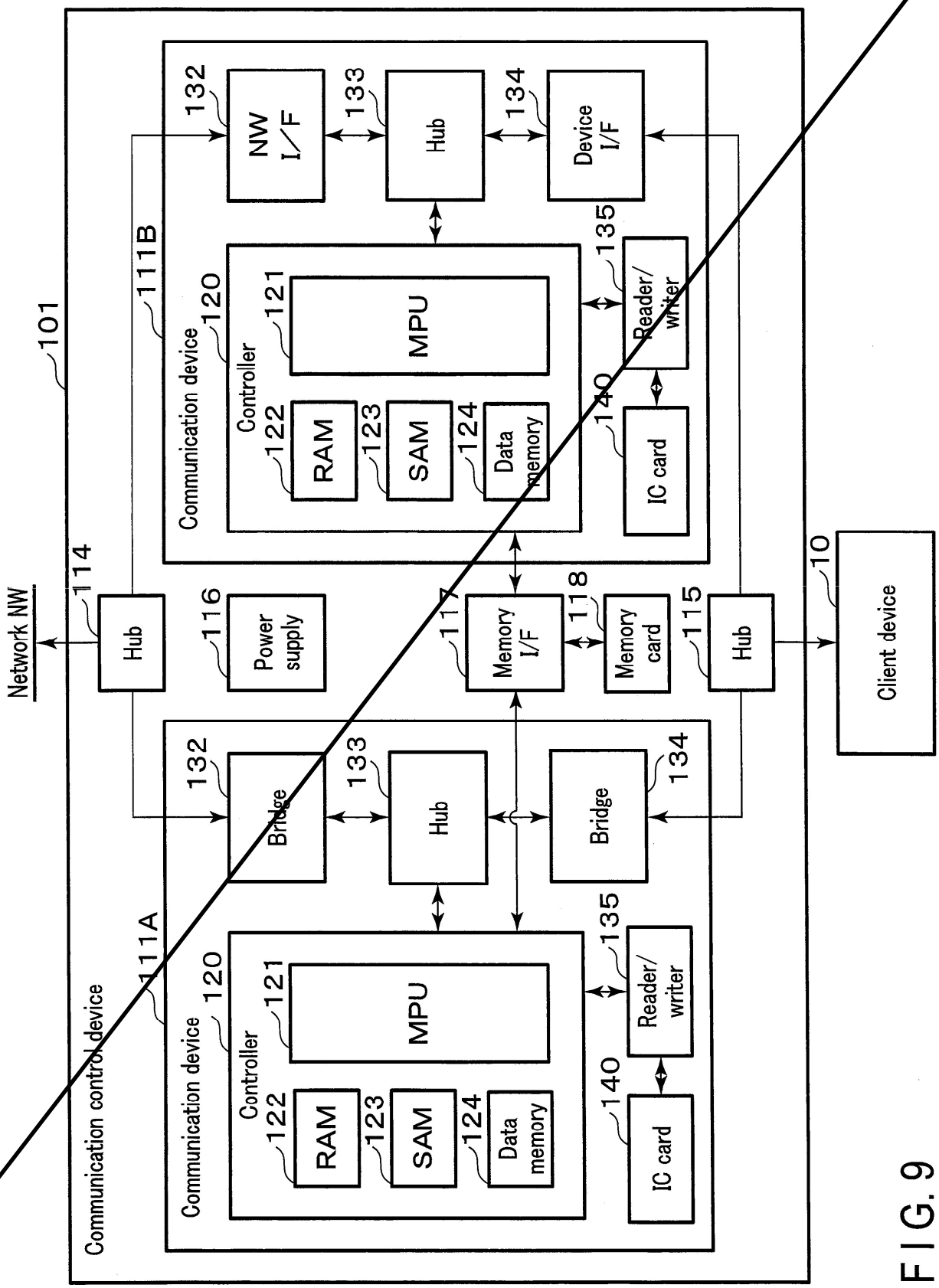

Communication control device
101
Network NW
Hub
114
Power supply
116
Memory I/F
117
Memory card
118
Hub
115
Client device
10
Communication device
111A
Controller
120
MPU
121
RAM
122
SAM
123
Data memory
124
Reader/writer
135
IC card
140
Bridge
132
Hub
133
Bridge
134
Communication device
111B
Controller
120
MPU
121
RAM
122
SAM
123
Data memory
124
Reader/writer
135
IC card
140
NW I/F
132
Hub
133
Device I/F
134

FIG. 9

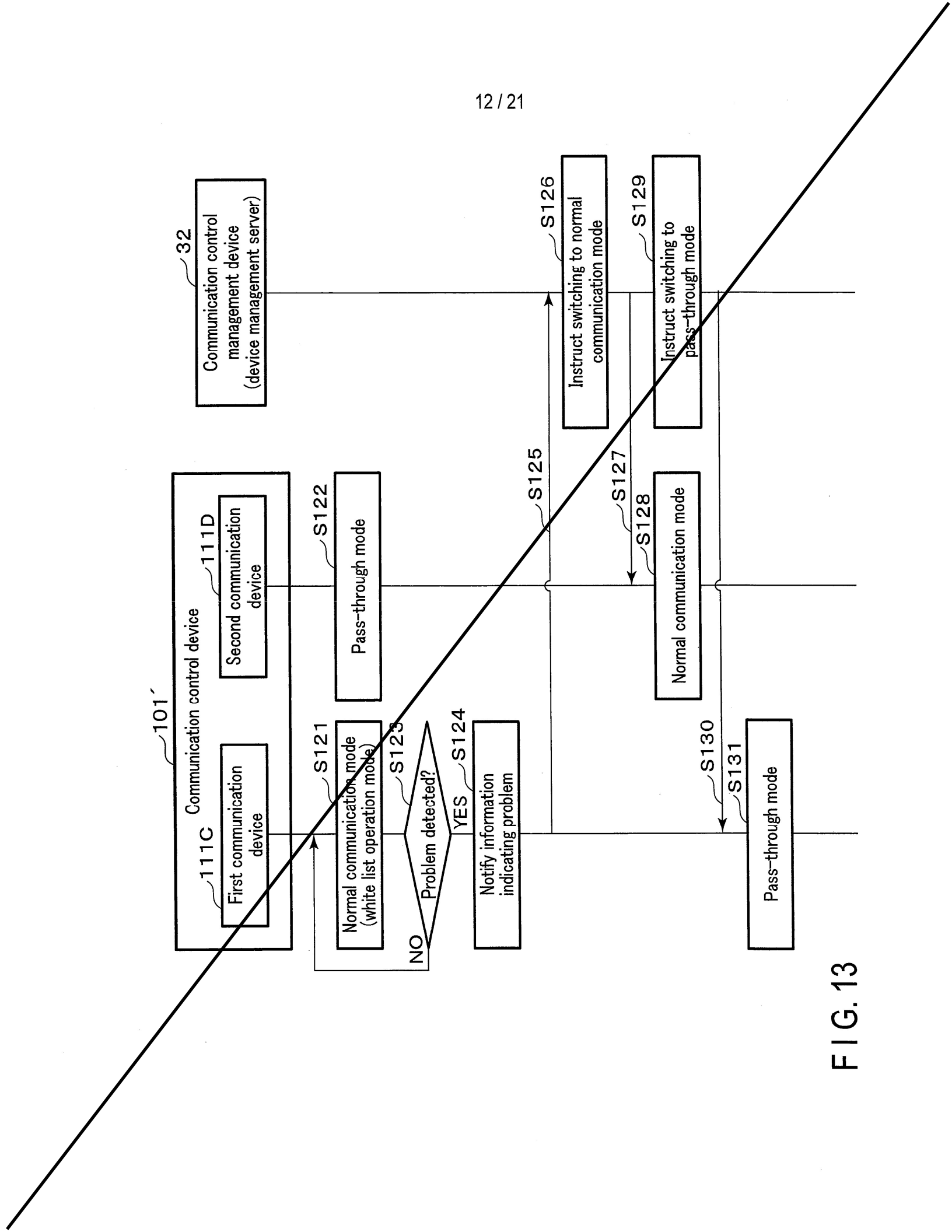

101'
Communication control device
111C
First communication device
111D
Second communication device
32
Communication control management device (device management server)
S121
Normal communication mode (white list operation mode)
S122
Pass-through mode
S123
Problem detected?
NO
YES
S124
Notify information indicating problem
S125
S126
Instruct switching to normal communication mode
S127
S128
Normal communication mode
S129
Instruct switching to pass-through mode
S130
S131
Pass-through mode

FIG. 13