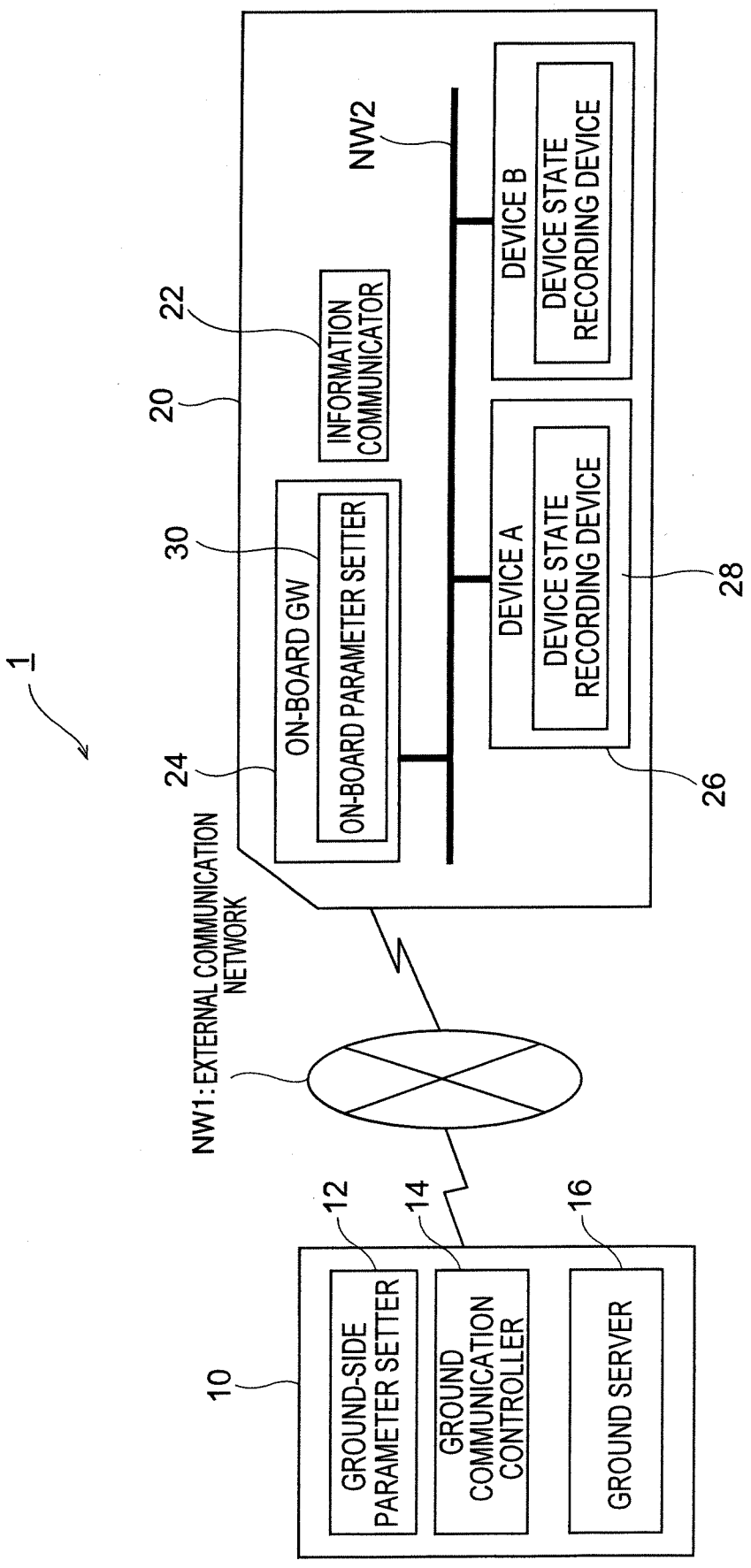

1
10
GROUND-SIDE PARAMETER SETTER
12
GROUND COMMUNICATION CONTROLLER
14
GROUND SERVER
16
NW1: EXTERNAL COMMUNICATION NETWORK
20
22
INFORMATION COMMUNICATOR
24
ON-BOARD GW
ON-BOARD PARAMETER SETTER
30
NW2
DEVICE A
DEVICE STATE RECORDING DEVICE
26
28
DEVICE B
DEVICE STATE RECORDING DEVICE

FIG. 1

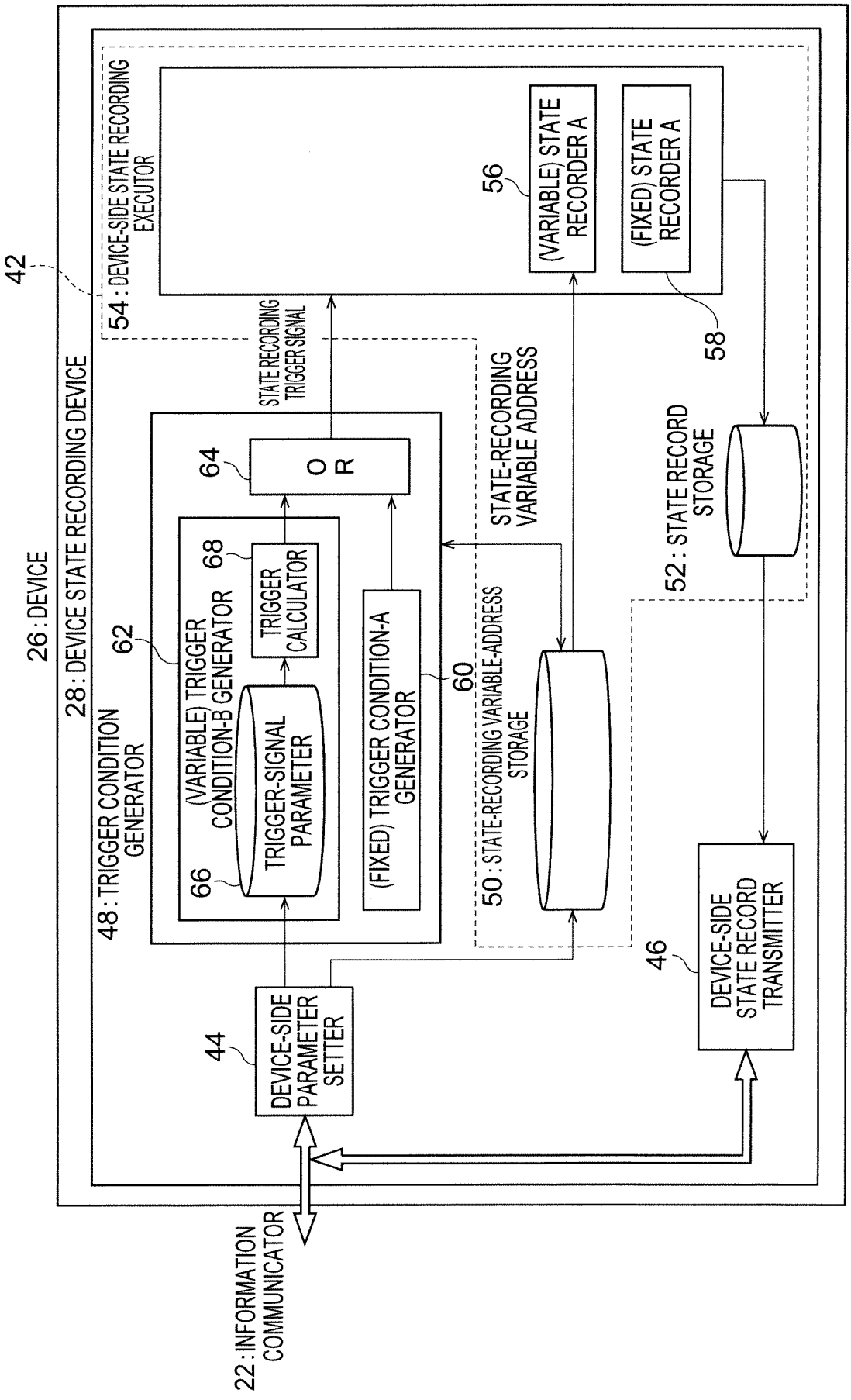

22 : INFORMATION COMMUNICATOR
26 : DEVICE
42
28 : DEVICE STATE RECORDING DEVICE
54 : DEVICE-SIDE STATE RECORDING EXECUTOR
56
(VARIABLE) STATE RECORDER A
(FIXED) STATE RECORDER A
58
STATE RECORDING TRIGGER SIGNAL
48 : TRIGGER CONDITION GENERATOR
62
(VARIABLE) TRIGGER CONDITION-B GENERATOR
68
TRIGGER CALCULATOR
64
O R
66
TRIGGER-SIGNAL PARAMETER
(FIXED) TRIGGER CONDITION-A GENERATOR
60
STATE-RECORDING VARIABLE ADDRESS
50 : STATE-RECORDING VARIABLE-ADDRESS STORAGE
52 : STATE RECORD STORAGE
44
DEVICE-SIDE PARAMETER SETTER
46
DEVICE-SIDE STATE RECORD TRANSMITTER

FIG. 2

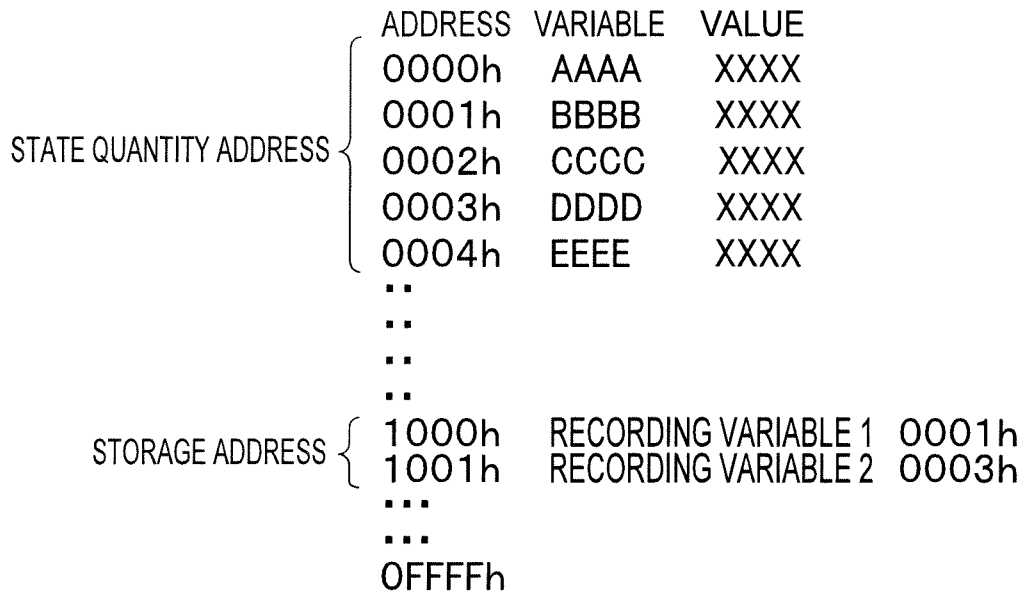

ADDRESS VARIABLE VALUE
STATE QUANTITY ADDRESS
0000h AAAA XXXX
0001h BBBB XXXX
0002h CCCC XXXX
0003h DDDD XXXX
0004h EEEE XXXX
STORAGE ADDRESS
1000h RECORDING VARIABLE 1 0001h
1001h RECORDING VARIABLE 2 0003h
0FFFFh

FIG. 3

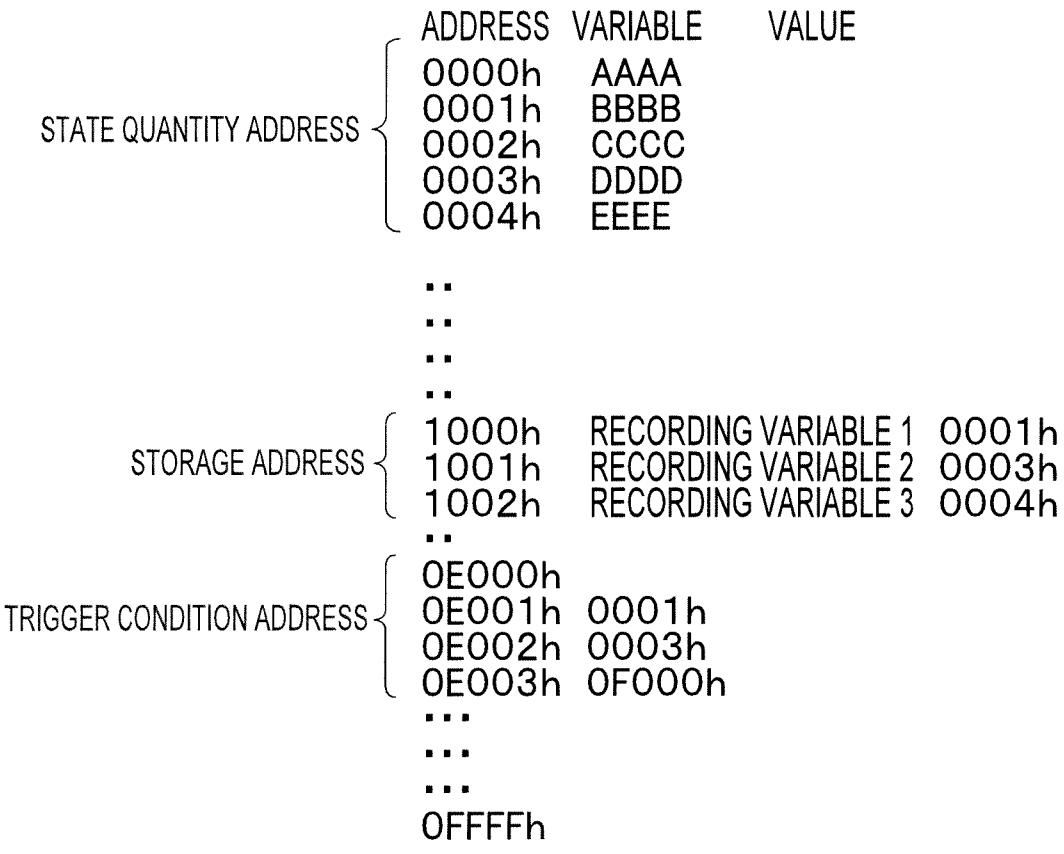

ADDRESS VARIABLE VALUE
STATE QUANTITY ADDRESS
0000h AAAA
0001h BBBB
0002h CCCC
0003h DDDD
0004h EEEE
STORAGE ADDRESS
1000h RECORDING VARIABLE 1 0001h
1001h RECORDING VARIABLE 2 0003h
1002h RECORDING VARIABLE 3 0004h
TRIGGER CONDITION ADDRESS
0E000h
0E001h 0001h
0E002h 0003h
0E003h 0F000h
0FFFFh

FIG. 4

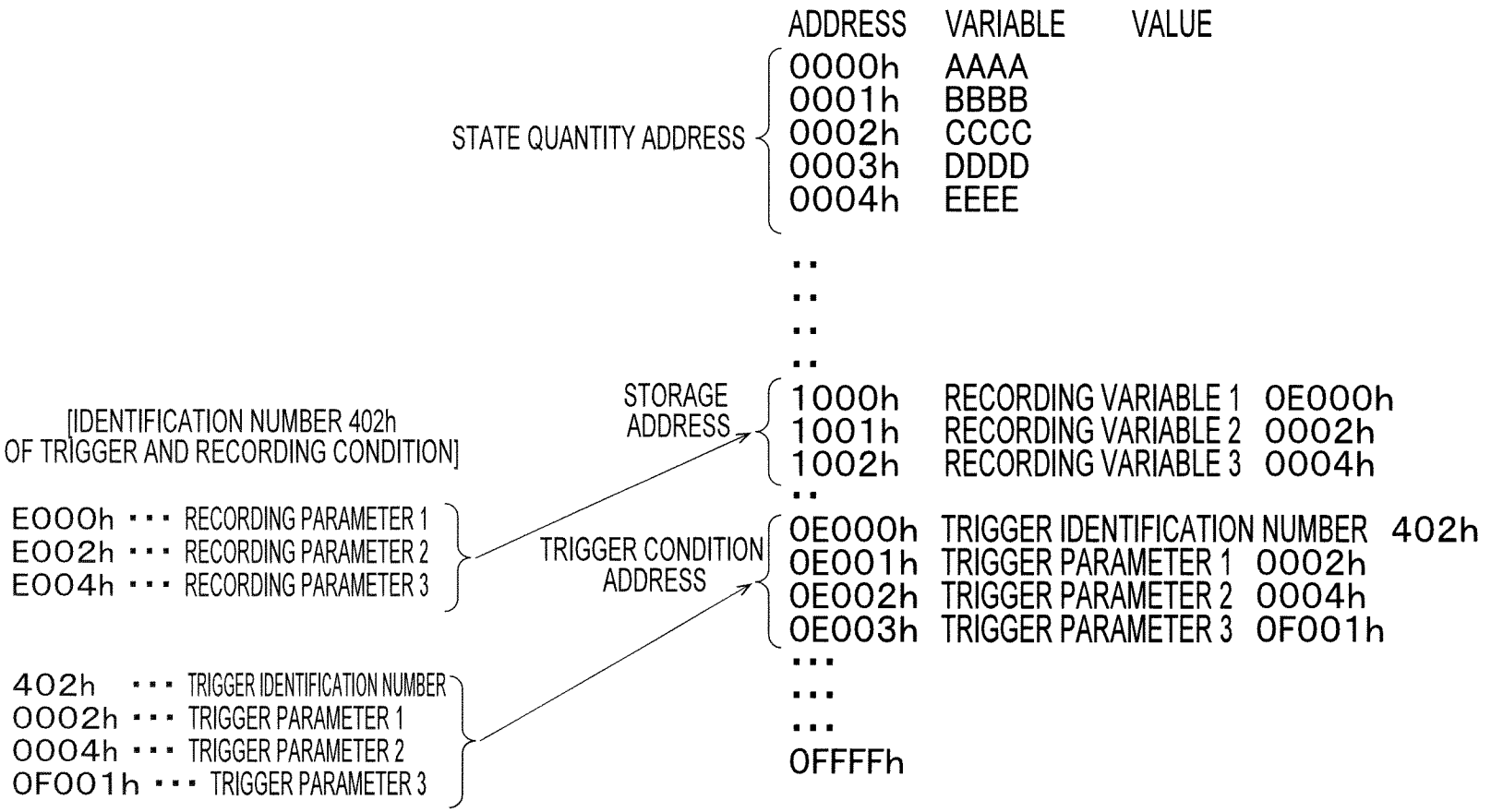

ADDRESS
VARIABLE
VALUE
STATE QUANTITY ADDRESS
0000h AAAA
0001h BBBB
0002h CCCC
0003h DDDD
0004h EEEE
STORAGE ADDRESS
1000h RECORDING VARIABLE 1 0E000h
1001h RECORDING VARIABLE 2 0002h
1002h RECORDING VARIABLE 3 0004h
[IDENTIFICATION NUMBER 402h OF TRIGGER AND RECORDING CONDITION]
E000h ··· RECORDING PARAMETER 1
E002h ··· RECORDING PARAMETER 2
E004h ··· RECORDING PARAMETER 3
TRIGGER CONDITION ADDRESS
0E000h TRIGGER IDENTIFICATION NUMBER 402h
0E001h TRIGGER PARAMETER 1 0002h
0E002h TRIGGER PARAMETER 2 0004h
0E003h TRIGGER PARAMETER 3 0F001h
402h ··· TRIGGER IDENTIFICATION NUMBER
0002h ··· TRIGGER PARAMETER 1
0004h ··· TRIGGER PARAMETER 2
0F001h ··· TRIGGER PARAMETER 3
0FFFFh

FIG. 5

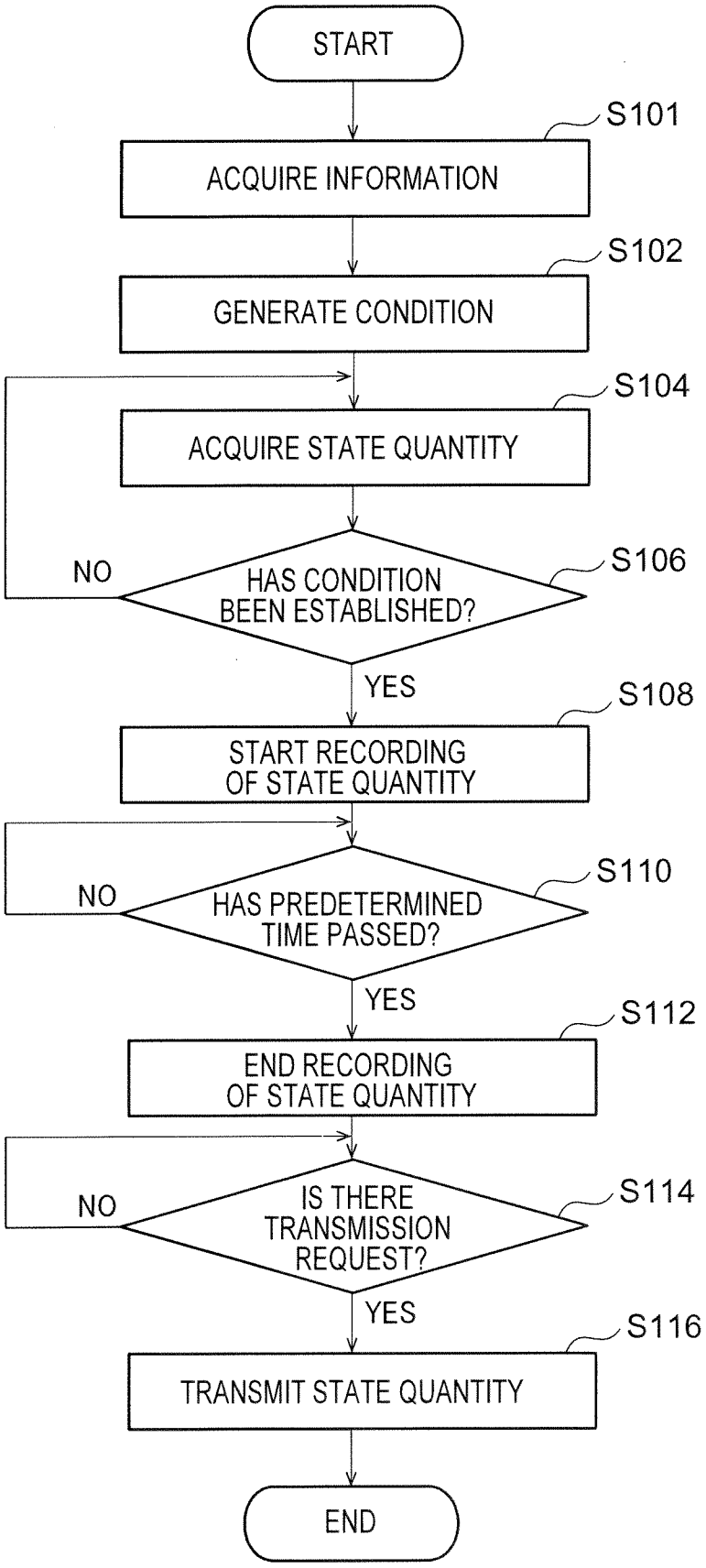

START
S101
ACQUIRE INFORMATION
S102
GENERATE CONDITION
S104
ACQUIRE STATE QUANTITY
S106
HAS CONDITION BEEN ESTABLISHED?
NO
YES
S108
START RECORDING OF STATE QUANTITY
S110
HAS PREDETERMINED TIME PASSED?
NO
YES
S112
END RECORDING OF STATE QUANTITY
S114
IS THERE TRANSMISSION REQUEST?
NO
YES
S116
TRANSMIT STATE QUANTITY
END

FIG. 6