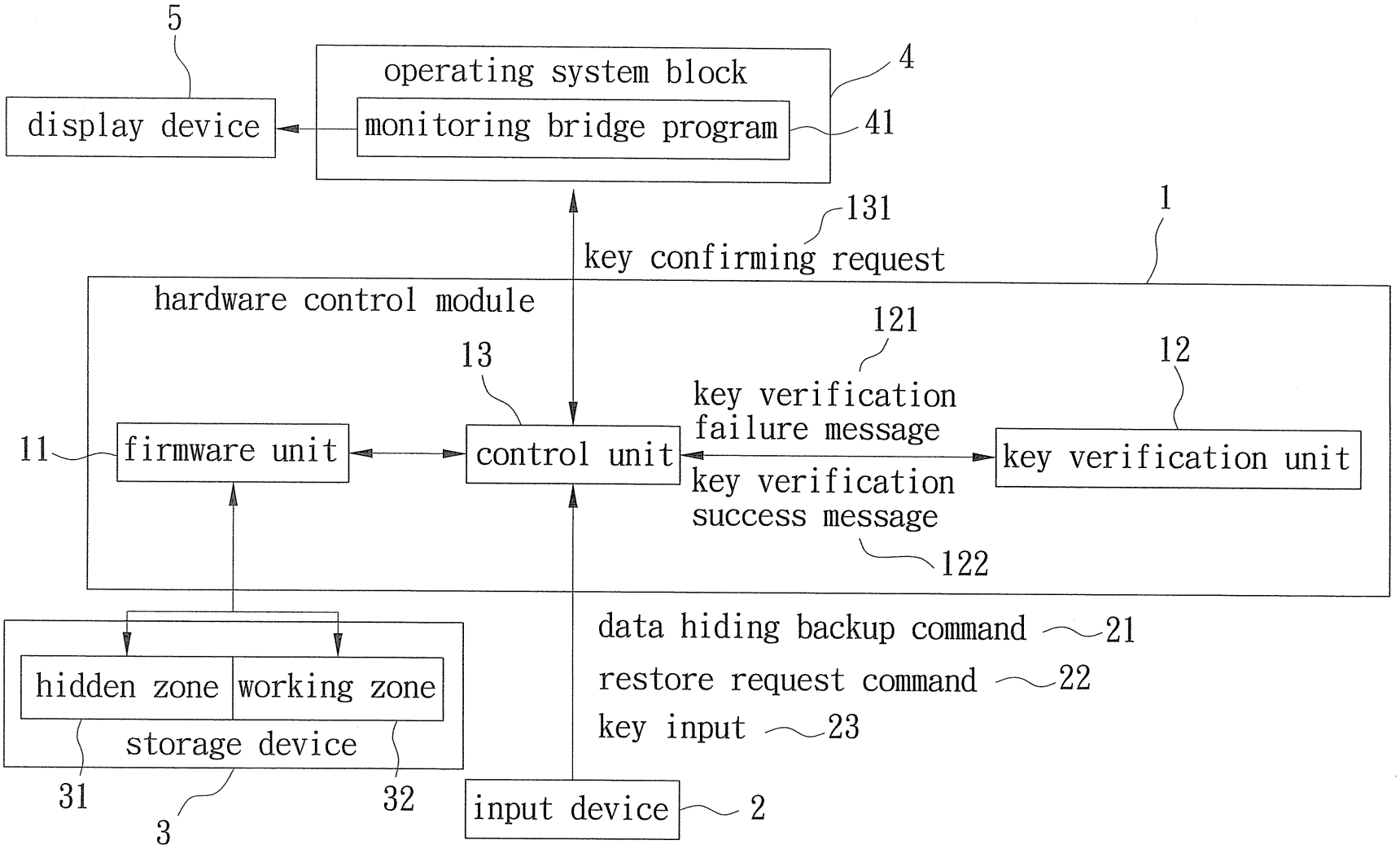
5
display device
operating system block
monitoring bridge program
4
41
131
key confirming request
1
hardware control module
121
13
12
key verification
failure message
11
firmware unit
control unit
key verification unit
key verification
success message
122
data hiding backup command
21
restore request command
22
key input
23
hidden zone
working zone
storage device
31
32
3
input device
2

FIG. 1

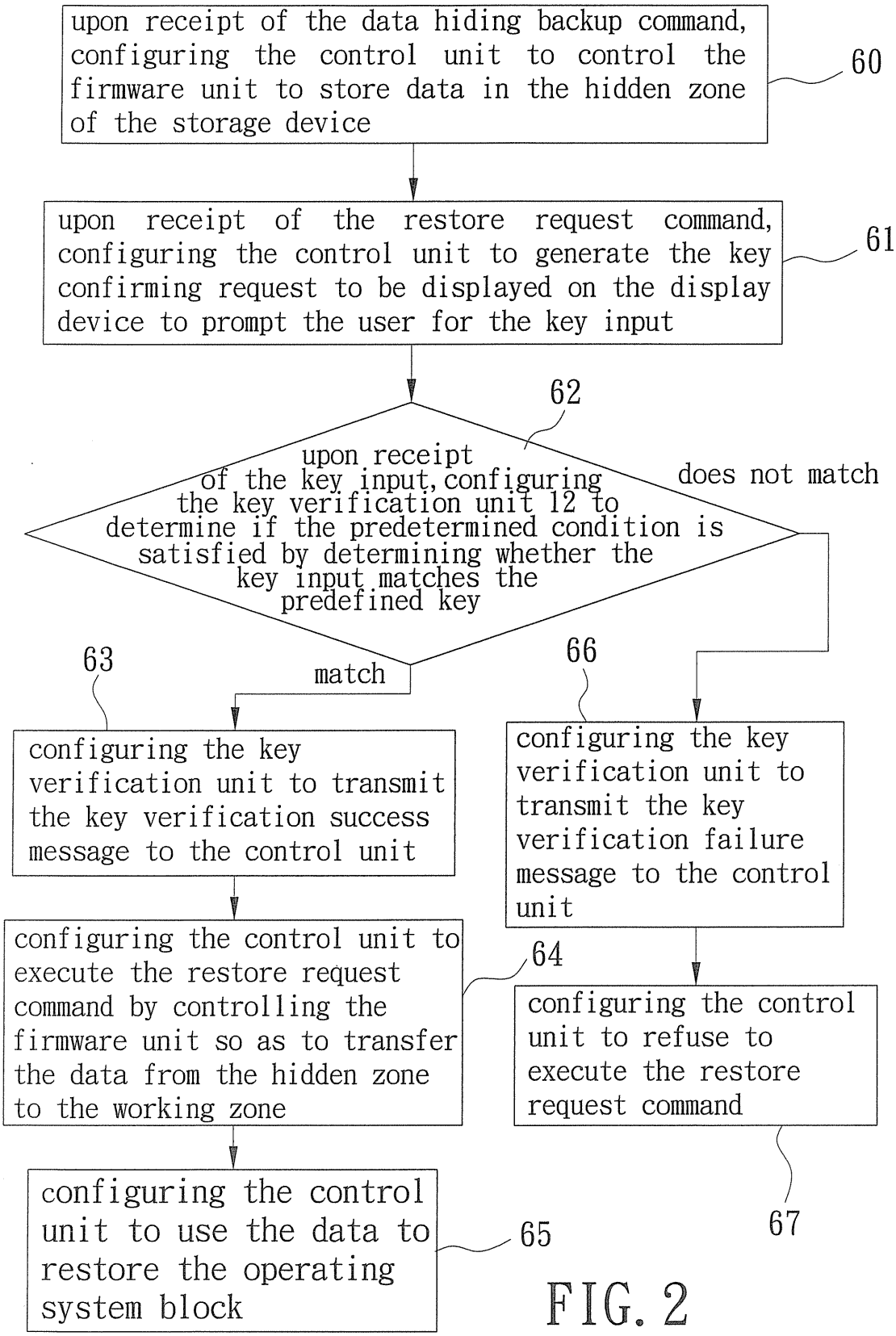
upon receipt of the data hiding backup command, configuring the control unit to control the firmware unit to store data in the hidden zone of the storage device
60
upon receipt of the restore request command, configuring the control unit to generate the key confirming request to be displayed on the display device to prompt the user for the key input
61
62
upon receipt of the key input, configuring the key verification unit 12 to determine if the predetermined condition is satisfied by determining whether the key input matches the predefined key
does not match
match
63
66
configuring the key verification unit to transmit the key verification success message to the control unit
configuring the key verification unit to transmit the key verification failure message to the control unit
configuring the control unit to execute the restore request command by controlling the firmware unit so as to transfer the data from the hidden zone to the working zone
64
configuring the control unit to refuse to execute the restore request command
67
configuring the control unit to use the data to restore the operating system block
65

FIG. 2

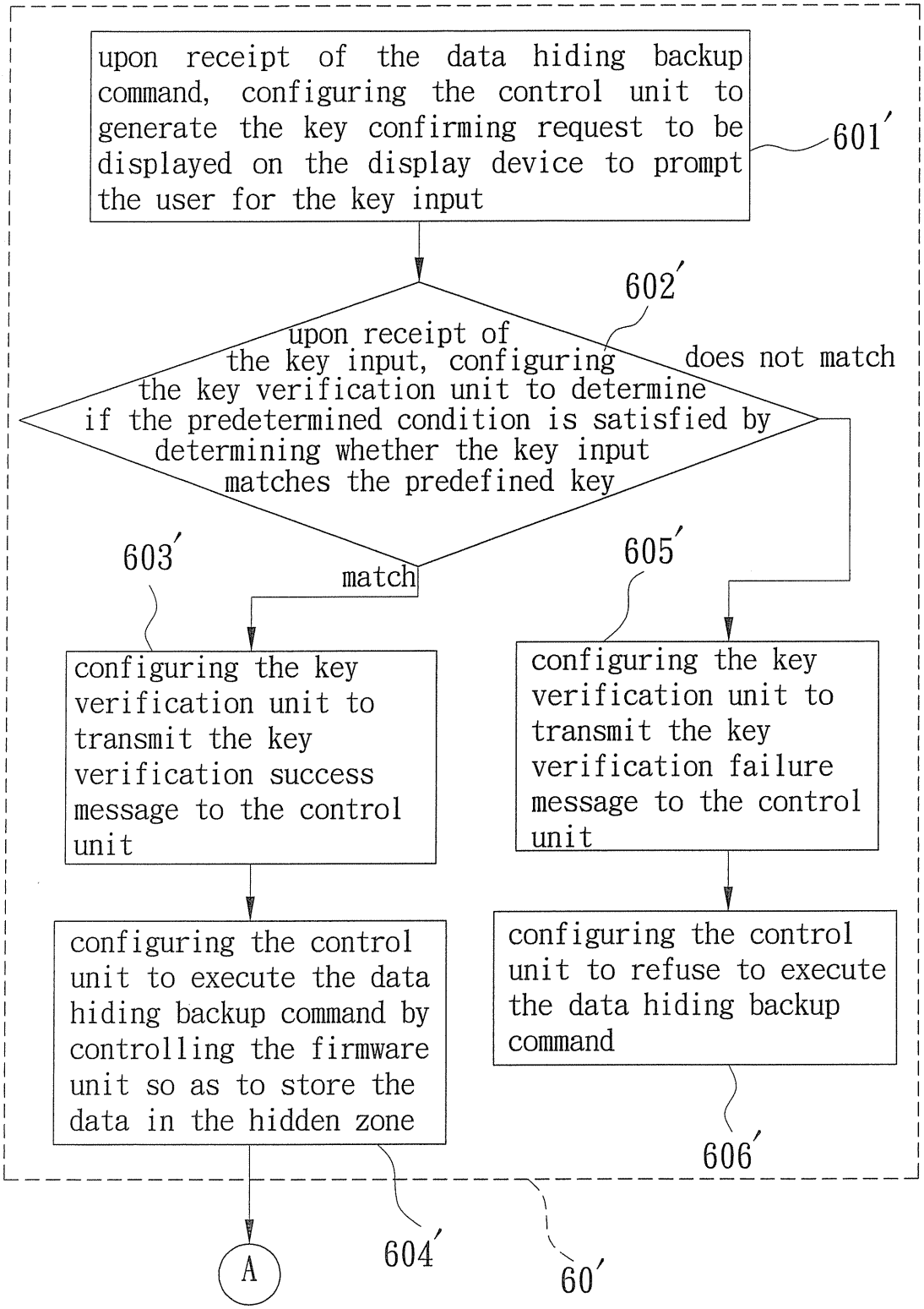
upon receipt of the data hiding backup command, configuring the control unit to generate the key confirming request to be displayed on the display device to prompt the user for the key input
601′
602′
upon receipt of the key input, configuring the key verification unit to determine if the predetermined condition is satisfied by determining whether the key input matches the predefined key
does not match
match
603′
605′
configuring the key verification unit to transmit the key verification success message to the control unit
configuring the key verification unit to transmit the key verification failure message to the control unit
configuring the control unit to execute the data hiding backup command by controlling the firmware unit so as to store the data in the hidden zone
configuring the control unit to refuse to execute the data hiding backup command
606′
A
604′
60′

FIG. 3A

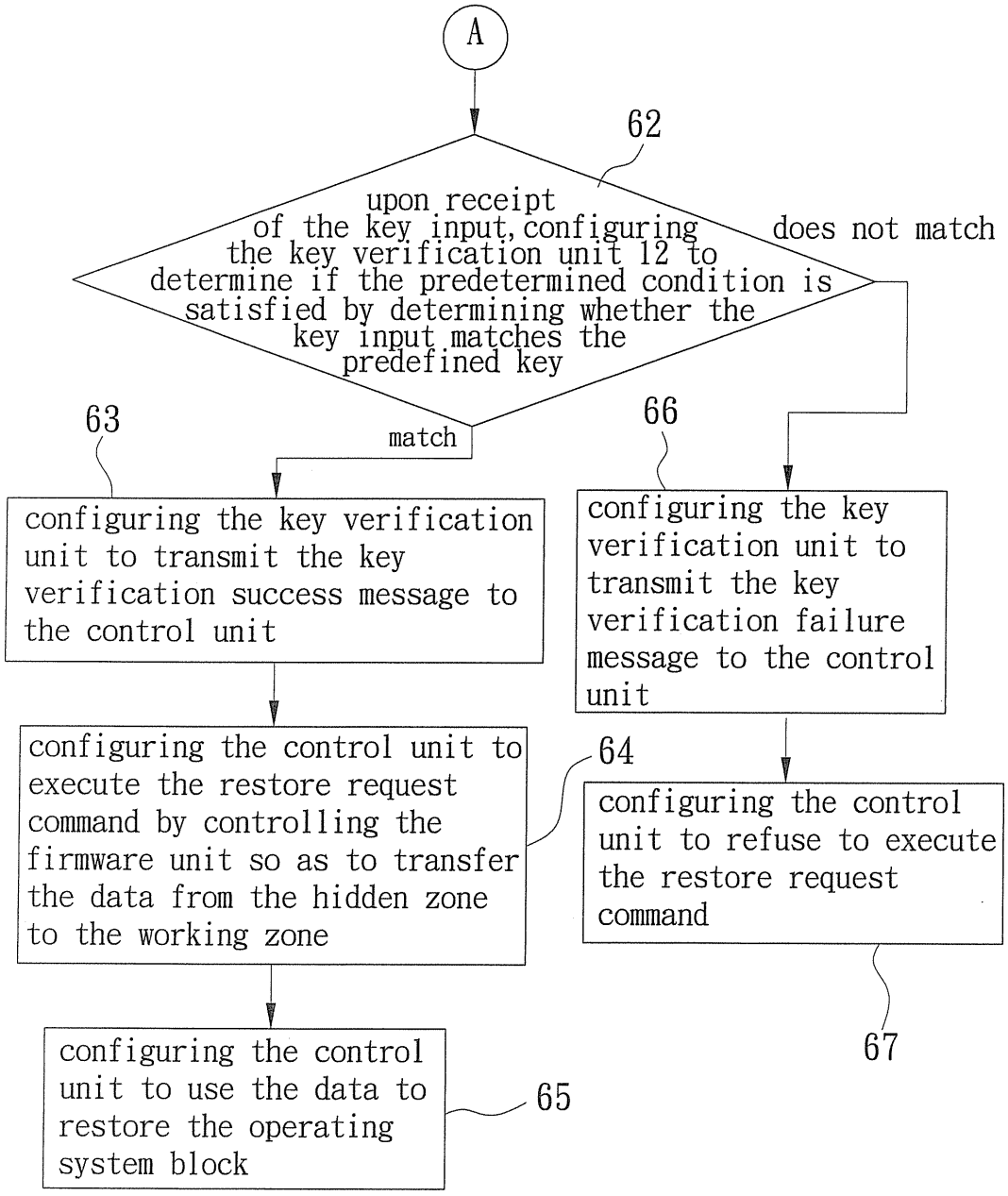
A
62
upon receipt of the key input, configuring the key verification unit 12 to determine if the predetermined condition is satisfied by determining whether the key input matches the predefined key
does not match
match
63
66
configuring the key verification unit to transmit the key verification success message to the control unit
configuring the key verification unit to transmit the key verification failure message to the control unit
configuring the control unit to execute the restore request command by controlling the firmware unit so as to transfer the data from the hidden zone to the working zone
64
configuring the control unit to refuse to execute the restore request command
67
configuring the control unit to use the data to restore the operating system block
65

FIG. 3B