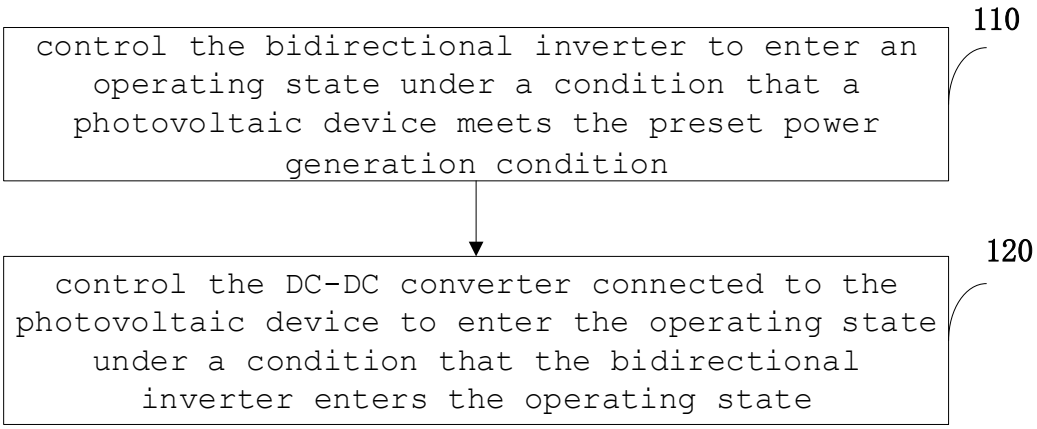

control the bidirectional inverter to enter an operating state under a condition that a photovoltaic device meets the preset power generation condition
110
control the DC-DC converter connected to the photovoltaic device to enter the operating state under a condition that the bidirectional inverter enters the operating state
120

Fig. 1

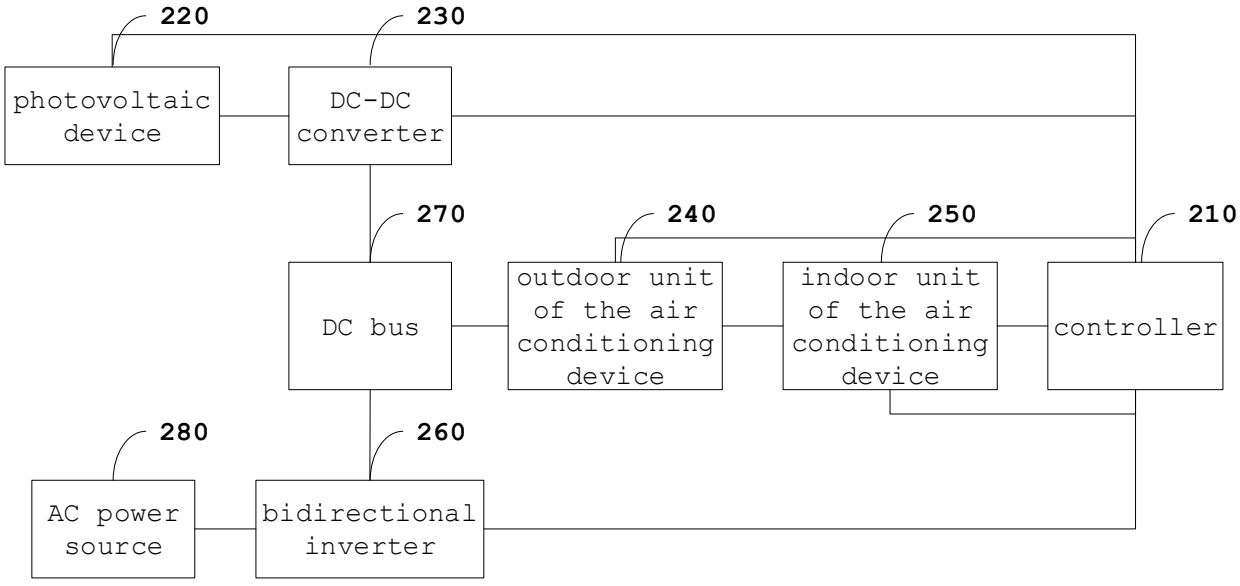

220
230
photovoltaic device
DC-DC converter
270
240
250
210
DC bus
outdoor unit of the air conditioning device
indoor unit of the air conditioning device
controller
280
260
AC power source
bidirectional inverter

Fig. 2

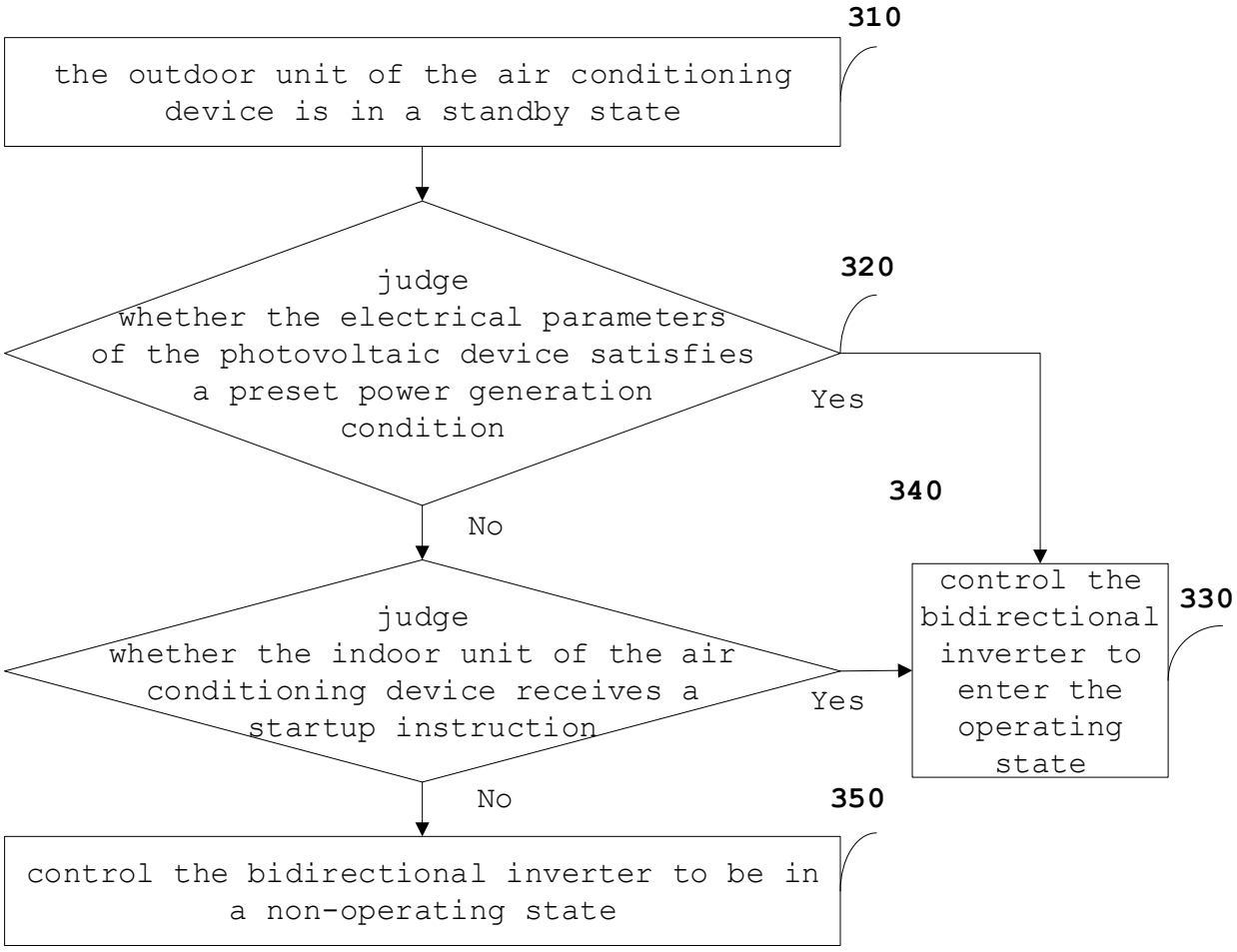

310
the outdoor unit of the air conditioning device is in a standby state
320
judge whether the electrical parameters of the photovoltaic device satisfies a preset power generation condition
Yes
No
340
control the bidirectional inverter to enter the operating state
330
judge whether the indoor unit of the air conditioning device receives a startup instruction
Yes
No
350
control the bidirectional inverter to be in a non-operating state

Fig. 3

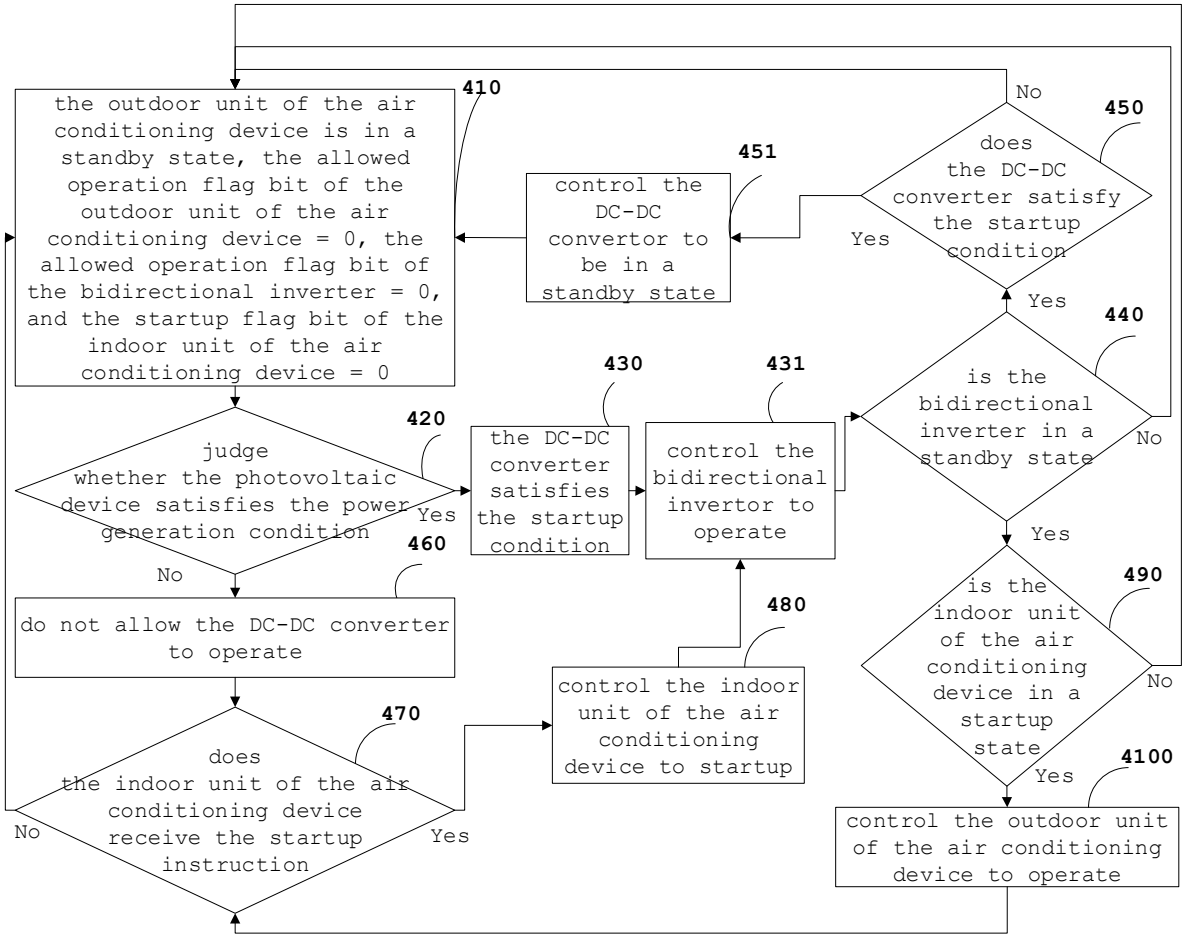

the outdoor unit of the air conditioning device is in a standby state, the allowed operation flag bit of the outdoor unit of the air conditioning device = 0, the allowed operation flag bit of the bidirectional inverter = 0, and the startup flag bit of the indoor unit of the air conditioning device = 0
410
judge whether the photovoltaic device satisfies the power generation condition
420
Yes
No
do not allow the DC-DC converter to operate
460
the DC-DC converter satisfies the startup condition
430
control the bidirectional invertor to operate
431
is the bidirectional inverter in a standby state
440
No
Yes
control the DC-DC convertor to be in a standby state
451
does the DC-DC converter satisfy the startup condition
450
No
Yes
is the indoor unit of the air conditioning device in a startup state
490
No
Yes
control the outdoor unit of the air conditioning device to operate
4100
control the indoor unit of the air conditioning device to startup
480
does the indoor unit of the air conditioning device receive the startup instruction
470
No
Yes

Fig. 4

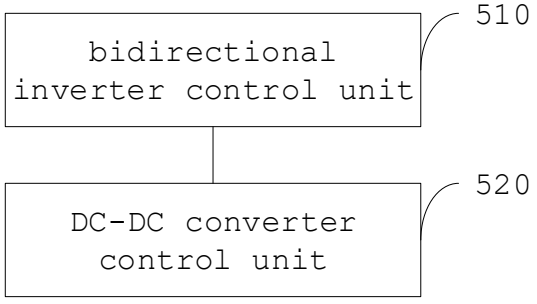

bidirectional inverter control unit
510
DC-DC converter control unit
520

Fig. 5

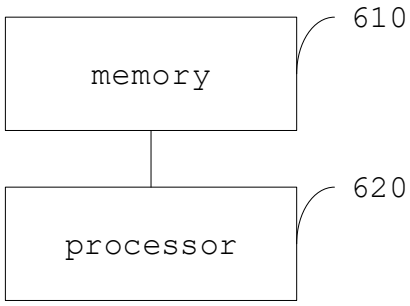

610
memory
620
processor

Fig. 6

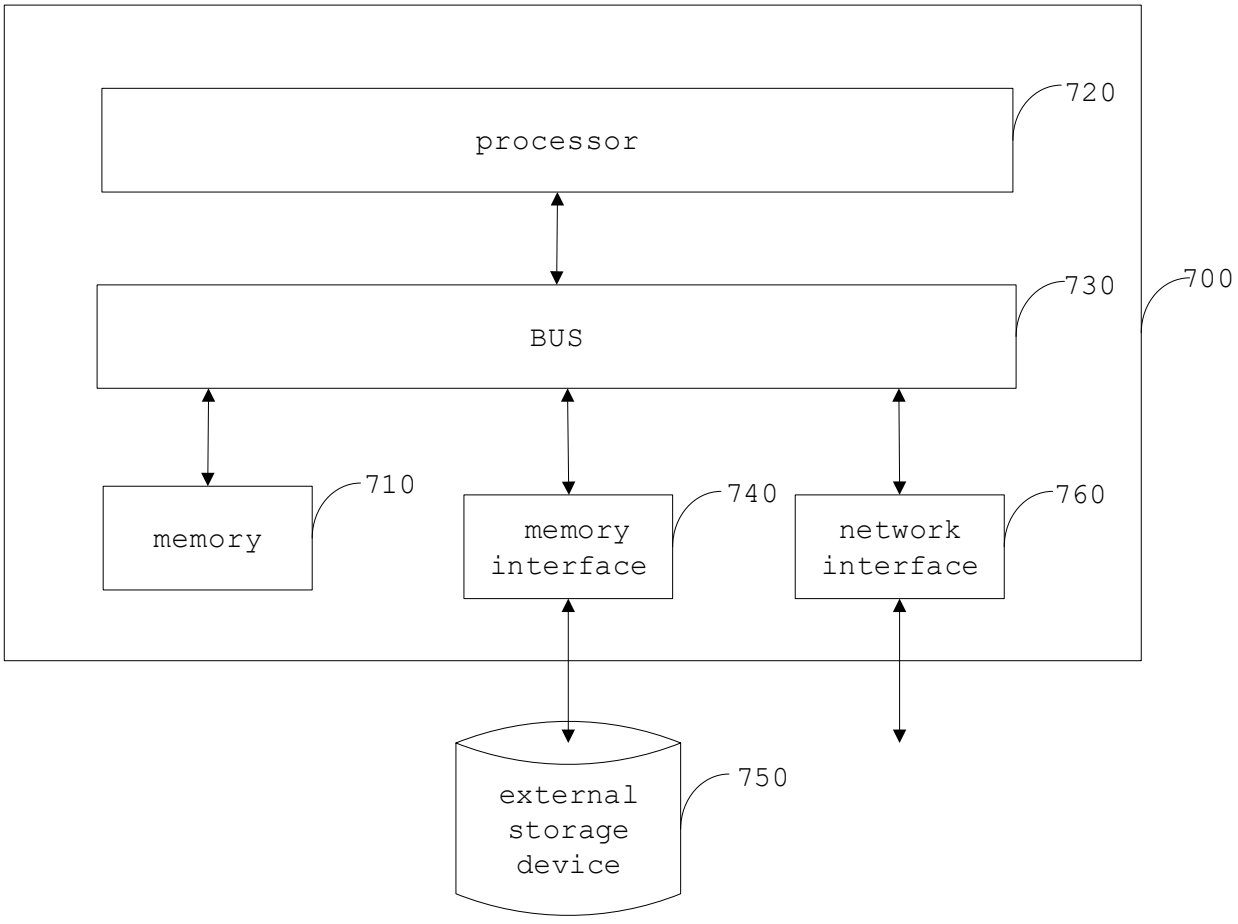

720
processor
730
700
BUS
710
memory
740
memory interface
760
network interface
750
external storage device

Fig. 7