DESCRIPTION

TITLE

AIR CONTROL SYSTEM, REFRIGERATION APPARATUS, AND TRANSPORT CONTAINER

TECHNICAL FIELD

[0001]

The present disclosure relates to an air control system, a refrigeration apparatus, and a transport container.

BACKGROUND ART

[0002]

Patent Document 1 discloses an internal environment control system configured to adjust the oxygen concentration of inside air. This system separates atmospheric air into nitrogen-enriched gas and oxygen-enriched gas using a separation membrane, and supplies the nitrogen-enriched gas into a storage to make the oxygen concentration of a storage lower than the oxygen concentration of the atmospheric air.

CITATION LIST

PATENT DOCUMENT

[0003]

Patent Document 1: Japanese Unexamined Patent Publication No. H08-000168

SUMMARY

TECHNICAL PROBLEM

substances contained in inside air. The third air filter (F3) filters the inside air flowing into the sensor case (143).

[0112]

(4-7) Flow Path Switching Mechanism

The air flow path (A) is provided with a flow path switching mechanism for changing the air flow. The flow path switching mechanism includes the first switching valve (151), the second switching valve (152), a third switching valve (153), a fourth switching valve (154), and the fifth switching valve (155). These switching valves (151, 152, 153, 154, 155) are configured as three-way valves.

[0113]

The first switching valve (151) is provided at the joint between the second inflow path (101b) and the internal exhaust path (104). The first switching valve (151) switches between a first state in which inside air is supplied to the gas separation module (120) and a second state in which inside air is discharged into the external space (6). Specifically, the first switching valve (151) in the first state allows the storage space (5) and the inflow trunk path (101c) to communicate with each other, and allows the storage space (5) and the external space (6) to be isolated from each other. The first switching valve (151) in the second state allows the storage space (5) and the inflow trunk path (101c) to be isolated from each other, and allows the storage space (5) and the external space (6) to communicate with each other.

[0114]

The second switching valve (152) is provided at the joint between the inflow trunk path (101c) and the bypass flow path (105). In other words, the second switching valve (152) is provided upstream of the gas separation membranes (124) in the inflow trunk path (101c). The second switching valve (152) switches between a first state in which air in the inflow path (101) is supplied to the gas separation module (120) and a second state in which the air in the