CLAIMS

1. A container refrigeration apparatus, comprising:

a casing (12) which is attached to an open end of a container (11) for housing a respiring plant (15), and forms an external storage space (S1) communicating with the exterior of the container (11) and an internal storage space (S2) communicating with the interior of the container (11);

a refrigerant circuit (20) in which a condenser (22) disposed in the external storage space (S1) and an evaporator (24) disposed in the internal storage space (S2) are connected together to perform a refrigeration cycle;

an external fan (25) which is disposed in the external storage space (S1), and guides outside air into the external storage space (S1) to form a flow of the outside air toward the condenser (22);

an internal fan (26) which is disposed in the internal storage space (S2), and guides inside air in the container (11) into the internal storage space (S2) to form a flow of the inside air toward the evaporator (24); and

an inside air control system (60) which includes a gas supply device (30) which supplies nitrogen-enriched air having a higher nitrogen concentration than the outside air to the internal storage space (S2), and an exhaust passage (46a) which allows a space on a blowout side of the internal fan (26) in the internal storage space (S2) to communicate with the external storage space (S1), and controls composition of the inside air in the container (11), wherein

the external storage space (S1) is divided by the condenser (22) into a first space (S11) upstream of the condenser (22), and a second space (S12) downstream of the condenser (22) in a direction of the flow of the outside air,

an external end of the exhaust passage (46a) is open on a suction side of the external fan (25) in the external storage space (S1), and

at least part of an external portion of the exhaust passage (46a) extending in the external storage space (S1) is disposed in the second space (S12) such that the inside air is heated in the at least part of the external portion by the outside air that has been heated by the refrigerant when passing through the condenser (22).

2. The container refrigeration apparatus of claim 1, wherein

the external storage space (S1) is divided by the condenser (22) into a first space (S11) upstream of the condenser (22), and a second space (S12) downstream of the condenser (22) in a direction of the flow of the outside air,

the external fan (25) is disposed in the second space (S12),

the second space (S12) is closed such that only a blowout port of the external fan (25) is open toward the exterior of the container, and

the external end of the exhaust passage (46a) is open in the second space (S12).

3. The container refrigeration apparatus of claim 1, wherein

the external portion of the exhaust passage (46a) is entirely disposed in the second space (S12) such that the inside air is heated in the external portion by the outside air that has been heated by the refrigerant when passing through the condenser (22).

4. The container refrigeration apparatus of claim 1, wherein

the exhaust passage (46a) is made of a tube (46a) which is inserted in a through hole (12d) formed through the casing (12) to penetrate the casing (12), and

a draining structure (90) which drains condensed water generated in the tube (46a)

out of the container is provided in an external portion of the tube (46a) extending in the external storage space (S1).

5. The container refrigeration apparatus of claim 4, wherein

the draining structure (90) includes a trap (91) which forms part of the tube (46a) and stores the condensed water, and a draining tube (93) connected to the trap (91) to guide the condensed water stored in the trap (91) out of the container.

6. The container refrigeration apparatus of claim 4, wherein

the draining structure (90) is disposed in the external portion of the tube (46a) to be adjacent to the through hole (12d).

7. The container refrigeration apparatus of claim 4, wherein

part of the external portion of the tube (46a) downstream of the draining structure (90) is disposed in the second space (S12) such that the inside air is heated in the part of the external portion by the outside air that has been heated by the refrigerant when passing through the condenser (22).