As illustrated in FIG. 9, the controller (110) includes a microcomputer (111) mounted on a control board, and a memory device (112) storing software for operating the microcomputer (111). The memory device (112) is a semiconductor memory.

[0124]

The controller (110) controls the components of the inside air control apparatus (100). The controller (110) receives values measured by the oxygen sensor (161) and the carbon dioxide sensor (162). The controller (110) controls the air pump (231), a first switching valve (232), and a second switching valve (233). The controller (110) controls the ventilation exhaust valve (151), the purge valve (251), the bypass valve (256), the gas discharge valve (272), the gas supply valve (273), and the measurement on-off valve (282).

[0125]

The controller (110) controls the ventilation apparatus (40). Specifically, the controller (110) rotates the opening and closing lid (45) of the ventilation apparatus (40) to adjust opening degrees of the air supply communication port (41a) and the air discharge communication port (42a). When the opening degree of the air supply communication port (41a) is changed, the flow rate of the outside air supplied to the storage space (5) through the air supply passage (41) changes. When the opening degree of the air discharge communication port (42a) is changed, the flow rate of the inside air discharged to the external space (6) through the air discharge passage (42) changes.

[0126]

-Control Operation of Controller (Overview)-

The outline of the control operation performed by the controller (110) will be described.

[0127]

<Oxygen Concentration Reduction Mode>

The controller (110) executes an oxygen concentration reduction mode when the air composition adjustment apparatus (90) starts operating. The oxygen concentration reduction mode is a control mode in which the air composition adjustment apparatus (90) is controlled so that the oxygen concentration of the inside air decreases from the oxygen concentration (21%) of the atmosphere to the set value SP_O2 of the oxygen concentration. The set value SP_O2 of the oxygen concentration is a sixth predetermined value. The oxygen concentration reduction mode is processing from step ST1 to step ST2 in the flowchart of FIG. 10.

[0128]

<Composition Maintenance Mode>