

GAS PURIFICATION APPARATUS

ABSTRACT

5

To improve the rate of recovery of a purification target gas from a gas purification apparatus that uses a PSA device, and achieve both a high purity and a high recovery rate with good power efficiency, there is provided a gas purification apparatus in which connection is established so as to be able to perform a pressure swing operation of alternately performing an adsorption step and a desorption step, wherein a membrane separator M that includes a separation membrane M1 impermeable to a purification target gas and permeable to a miscellaneous gas, and that separates the purification target gas and the miscellaneous gas by an exhaust gas pressure of adsorption towers A1 to A4 is provided in a miscellaneous gas discharge line L3, and a regenerated gas return line L5 for returning the regenerated gas in which the concentration of the purification target gas has been increased by the separation membrane M1 to a source gas supply line L1 is provided.

20 Figure 1