OXYGEN CONCENTRATION APPARATUS

ABSTRACT OF THE DISCLOSURE

An oxygen concentration apparatus (300) according to the present invention has: pressure swing adsorption type oxygen concentration means (310); and a control means (350) that controls switching means (316) that switches between intake of pressurized air into an adsorption column (312) and exhaust from the adsorption column. The switching means is controlled based on pressure in oxygen concentrated gas in the conduit measured by pressure measuring means to adjust a cycle of adsorption and regeneration processes of the oxygen concentration means so that pressure at the upstream of flow rate adjusting means (340) can be controlled and, as a result, the need for a mechanical pressure regulating valve, that has been needed conventionally, can be eliminated. Further, there is also shown a gas supply apparatus that comprises ultrasonic type gas concentration and flow rate measuring means that comprises, in turn, two ultrasonic transducers that is disposed in an opposed manner in the conduit through which product gas flows so that a concentration value measured when the product gas output is stopped is determined to be a product gas concentration.

Figure 9