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Lee et al.

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(54) **OXYGEN CONCENTRATING METHOD AND APPARATUS HAVING CONDENSATE WATER REMOVING FUNCTION**

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ABSTRACT

An oxygen concentrating apparatus includes: at least one adsorption bed which is filled with adsorbent capable of selectively adsorbing nitrogen relative to oxygen; an air supplier which supplies pressurized air to the adsorption bed; a flow channel regulating valve unit which regulates flow channels by allowing the pressurized air to be supplied to the adsorption bed from the air supplier and by allowing the air to be discharged from the adsorption bed to be depressurized such that a nitrogen adsorption process and a nitrogen desorption process are alternately performed; and a water removing unit which separates water from the pressurized air supplied from the air supplier and removes the separated water. The flow channel regulating unit and the water removing unit are at least partially housed within a single housing.

7 Claims, 13 Drawing Sheets

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See application file for complete search history.

