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ION EXCHANGE SCRUBBER



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ABSTRACT OF DISCLOSURE

5 An ion exchange scrubber has a housing, and a partition plate installed within
the housing. The partition plate partitions an inner space of the housing in longitudinal
direction into two chambers that are filled with a predetermined amount of aqueous
solution. The upper end portions of the two partitioned chambers communicate with
each other. At least one cartridge is installed at the upper portion and has an ion
10 exchange resin. At least one gas inlet hole is formed in an external plate of the chamber
at position below the position where the cartridge is installed. At least one gas inlet
tube is connected with the gas inlet hole. A gas exhaust hole is formed in an upper plate
of the housing. At least one introduction/exhaustion hole is formed at a lower portion
of the chamber, for supplying or exhausting the aqueous solution. At least one
15 connection tube connects the introduction/exhaustion holes with each other. At least
one level control valve is installed in the at least one connection tube. The ion
exchange resin removes a harmful substance contained in the gas. By repeatedly
pumping the aqueous solution from one side chamber to the other side chamber, and
immersing and cleaning the contaminated ion exchange resin in the aqueous solution,
20 the contaminated gas can be effectively processed even with a small amount of water.

Figure 3