

Title (en)
HEAT RECOVERY IN ABSORPTION AND DESORPTION PROCESSES

Title (de)
WÄRMERÜCKGEWINNUNG BEI ABSORPTIONS- UND DESORPTIONSPROZESSEN

Title (fr)
RÉCUPÉRATION DE CHALEUR AU COURS DE PROCESSUS D'ABSORPTION ET DE DÉSORPTION

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Application
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Abstract (en)
[origin: CA2842981A1] The invention relates to a method for removing components to be separated from industrial gases by means of absorption and desorption processes that use liquid absorbents, wherein at least one absorption device (20) and one desorption device (22) are provided, at least a part of the laden solution leaving the absorption device (20) is diverted before being heated and is delivered to the head of the heat transfer section (22a), and said laden partial stream is heated by the steam rising from the lower part of the desorption device (22b) through heat exchange in the heat transfer section (22a). The remaining stream of cold, laden solution (5a) leaving the absorption device (20) is expanded by means of the relief valve (25) and via the heat exchanger (21) into a pressure relief vessel (26), such that the stream leaving the heat exchanger (21) separates into a liquid and a gaseous state, wherein the pressure in the pressure relief vessel (26) is lowered in such a way that the total energy demand in absorption and desorption processes is reduced.

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