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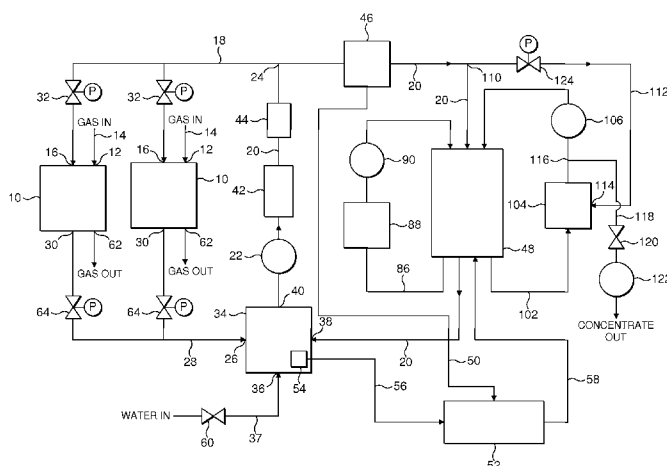
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(54) Title: METHOD OF TREATING A GAS STREAM



(57) Abstract: In a method of treating a gas stream, an aqueous scrubbing liquor is circulated through an essentially closed loop (20) comprising an electrochemical unit (48) for reducing the acidity of the liquor. A portion of the circulating liquor is diverted away from the closed loop (20) to a gas scrubbing unit (10). The gas stream enters the scrubbing unit (10), wherein an acid, for example HF and solid particulates, for example SiO₂ particulates, within the gas stream dissolve in the diverted liquor. The diverted liquor is subsequently returned to the closed loop (20), and is replenished in the scrubbing unit (10) by fresh liquor diverted from the closed loop (20). A device (46) is provided for monitoring the acidity of the liquor at a location within the closed loop (20). The reduction in the acidity of the liquor by the electrochemical cell (48) is controlled depending on the monitored concentration. By controlling the acidity of the liquor, the solubility of the solid particulates within the diverted portion of the liquor may be optimised. This can increase the lifetime of one or more filter cartridges (42) located in the closed loop (20) upstream from the electrochemical unit (48).

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- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*