

Title (en)

METHOD AND DEVICE FOR THE ABSORPTION OF ACID GAS FROM NATURAL GAS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ABSORPTION VON SAUER GAS AUS ERD GAS

Title (fr)

PROCEDE ET DISPOSITIF D'ABSORPTION DE GAZ ACIDE DANS DU GAZ NATUREL

Publication

EP 1902118 A2 20080326 (DE)

Application

EP 06753798 A 20060523

Priority

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Abstract (en)

[origin: DE102005030028A1] Absorption of hydrogen sulfide and carbon dioxide from compressed natural gas uses two absorption columns, hydrogen sulfide being removed in second column using regenerated solvent : Absorption of hydrogen sulfide and carbon dioxide from compressed natural gas (1) uses a physical absorption agent. The gas is fed into an absorption column (2) where it contacts the absorption agent (3). This is then fed at a lower pressure to a first separator (7), in which part of the absorbed acid gas is removed. At least some of the agent (10) is then fed, with a further drop in pressure, to a stripping column (15), in which the remainder of the dissolved gas is driven off. Some or all of the regenerated agent (16) is recycled to the absorption column. Acid gas (9) leaving the first separator is fed to another absorption column (7a), in which hydrogen sulfide is removed with regenerated solvent and the product mixed with loaded solvent (10) leaving the first separator. The acid gases which have not been absorbed in the second absorption column are fed to the stripping column to remove hydrogen sulfide from solvent fed through it. The purified solvent (16) produced is divided into two streams, one of which (8) is fed back to the second absorption column while the other is fed back to the first absorption column. An independent claim is included for apparatus for use in carrying out the method, in which the first separator and second absorption column form a single unit, the separator being built into the sump of the absorption column.

IPC 8 full level

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