

Title (en)

Drying process for gases making use of glycol including the separation of gaseous effluents

Title (de)

Verfahren zur Trocknung von Gasen mittels Glycol mit anschliessender Raffinierung von gasförmigen Abflüssen

Title (fr)

Procédé de séchage de gaz au glycol incluant la purification des rejets gazeux

Publication

**EP 0770667 B1 20000823 (FR)**

Application

**EP 96402157 A 19961010**

Priority

FR 9512689 A 19951027

Abstract (en)

[origin: EP0770667A1] A process for dehydrating natural gas or refinery gas, contg. methane and other light alkanes, BTEX (benzene, toluene, ethyl benzene and xylene), water and opt. CO<sub>2</sub>, N<sub>2</sub> and/or H<sub>2</sub>S, using a liq. desiccant, comprises: (a) absorbing water and BTEX by contact with regenerated liq. desiccant (from step (c)) to produce a dry gas stream and a loaded liq. desiccant stream; (b) separating the loaded liq. desiccant into a vapour phase, mainly contg. methane, steam and part of the BTEX, and a liq. phase mainly contg. the desiccant loaded with water and BTEX; (c) regenerating the liq. desiccant in reboiling and distillation zones, in which the distillation zone produces a vapour phase, contg. steam and BTEX, and the regenerated liq. desiccant returning to step (a); (d) condensing the vapour phase from the distillation zone, and separating the three phases, i.e. a BTEX-contg. gas stream, a BTEX-contg. liq. hydrocarbon phase and a liq. aq. phase; and (e) treating at least the BTEX-contg. gas stream in a scrubbing zone by absorbing the BTEX in a withdrawn regenerated liq. desiccant fraction and passing the BTEX-loaded desiccant to a point in the regeneration zone of step (b), the gas stream leaving the scrubbing zone being free from BTEX.

IPC 1-7

**C10L 3/10**; **C10G 5/04**

IPC 8 full level

**C10G 5/04** (2006.01); **C10L 3/10** (2006.01)

CPC (source: EP US)

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