Title (en)

PROCESS AND APPARATUS FOR REMOVAL OF SOUR SPECIES FROM A NATURAL GAS STREAM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ENTFERNUNG VON SAUREN SPEZIES AUS EINEM ERDGASSTROM

Title (fr)

PROCEDE ET APPAREIL DESTINES A LA SUPPRESSION D' ESPECES ACIDES A PARTIR D' UN FLUX DE GAZ NATUREL

Publication

EP 1931755 A4 20110803 (EN)

Application

EP 06774984 A 20060915

Priority

- AU 2006001356 W 20060915
- AU 2005905089 A 20050915

Abstract (en)

[origin: WO2007030888A1] A process for removal of sour species from a dehydrated natural gas feed stream is provided. The dehydrated natural gas feed stream is cooled to conditions where a slurry of solid sour species and hydrocarbon liquids is formed together with a gaseous stream containing gaseous sour species. The gaseous stream containing gaseous sour species is then separated from the slurry and treated with a liquid solvent, thereby forming a liquid solution of the sour species and a dehydrated sweetened natural gas product stream. An apparatus for removing sour species from a dehydrated natural gas feed stream is also provided. The apparatus has a vessel with a solids formation zone in fluid communication with a gas solvation zone. The solids formation zone is configured to facilitate formation of a slurry of solid sour species and hydrocarbon liquids and a gaseous stream containing gaseous sour species. The gas solvation zone is configured to facilitate formation of a liquid solution of sour species. The apparatus has an inlet for introducing the dehydrated natural gas feed stream to the solids formation zone, a conduit configured to direct the gaseous stream from the solids formation zone to the gas solvation zone, and an inlet for introducing liquid solvent into the gas solvation zone.

IPC 8 full level

C10L 3/10 (2006.01); **F25J 3/08** (2006.01)

CPC (source: EP US)

B01D 53/002 (2013.01 - EP US); **B01D 53/1462** (2013.01 - EP US); **B01D 53/1493** (2013.01 - EP US); **C10L 3/10** (2013.01 - EP US); **C10L 3/102** (2013.01 - EP US); **F25J 3/0209** (2013.01 - EP US); **F25J 3/0233** (2013.01 - EP US); **F25J 3/0242** (2013.01 - EP US); **F25J 3/0266** (2013.01 - EP US); B01D 2257/306 (2013.01 - EP US); B01D 2257/308 (2013.01 - EP US); B01D 2257/602 (2013.01 - EP US); F25J 2200/02 (2013.01 - EP US); F25J 2200/90 (2013.01 - EP US); F25J 2205/04 (2013.01 - EP US); F25J 2205/20 (2013.01 - EP US); F25J 2205/50 (2013.01 - EP US); F25J 2240/02 (2013.01 - EP US); F25J 2240/40 (2013.01 - EP US); F25J 2270/12 (2013.01 - EP US); F25J 2270/60 (2013.01 - EP US); F25J 2270/66 (2013.01 - EP US); F25J 2290/40 (2013.01 - EP US); Y02C 20/40 (2020.08 - EP US)

Citation (search report)

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DOCDB simple family (publication)

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