Title (en)
THERMOSYPHON REBOILER FOR THE DENITROGENATION OF LIQUID NATURAL GAS

Title (de)
WÄRMESIPHON-VERDAMPFER ZUR DENITROGENIERUNG VON FLÜSSIGEM ERDGAS

Title (fr)
REBOUILLEUR À THERMOSIPHON POUR LA DÉNITROGÉNATION DE GAZ NATUREL LIQUIDE

Publication
**EP 2215415 A2 20100811 (EN)**

Application
**EP 08856437 A 20081128**

Priority
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• US 94982807 A 20071204

Abstract (en)
[origin: US2009139263A1] Processes are provided for the denitrogenation of a crude LNG stream. A crude LNG stream is expanded and then cooled in a thermosyphon reboiler. The resultant crude LNG stream is introduced into a nitrogen rejection column, wherein the nitrogen content of the LNG is reduced as the liquid flows down the column. A nitrogen-enriched vapor stream is withdrawn from the top of the column, and a first, and optionally a second, nitrogen-diminished liquid stream is withdrawn from the bottom of the column. The first stream may be recovered as a LNG product, and the second stream is passed through the thermosyphon reboiler, cooling the crude LNG stream, while partially vaporizing the second stream. The vaporized second stream is reinjected into the column at a level above the level of withdrawal of the second nitrogen-diminished bottoms LNG stream to provide column boilup. Alternatively, the thermosyphon reboiler is placed within the column.

IPC 8 full level
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CPC (source: EP US)
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