

Title (en)

PROCESS AND INSTALLATION FOR REHEATING A COLD FLUID

Publication

**EP 0035444 B1 19850626 (FR)**

Application

**EP 81400294 A 19810226**

Priority

FR 8004509 A 19800229

Abstract (en)

[origin: ES8201302A1] This invention relates to the reheating of a cold cryogenic fluid by heat exchange with a warm liquid, commonly water. The cold cryogenic fluid first flows into a descending tube and then into a rising tube whereas the water trickles along the tubes and from an upper supply, as far as a base manifold. The invention is particularly applicable to the reheating and revaporization of liquified natural gas.

IPC 1-7

**F17C 9/02**

IPC 8 full level

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Citation (examination)

- GB 911847 A 19621128 - NORTH THAMES GAS BOARD
- FR 2096919 A1 19720303 - AIR LIQUIDE, et al
- FR 1393641 A 19650326 - BROWN FINTUBE CO
- DE 2052154 A1 19720427

Cited by

EP0450906A1; US9951906B2; US11371655B2; EP3710743A4; WO2008012286A1

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DE 3171087 D1 19850801; ES 499734 A0 19811201; ES 8201302 A1 19811201; FR 2477276 A1 19810904; FR 2477276 B1 19820730;  
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