

Title (en)
DEVICE AND METHOD FOR PRE-COOLING A STREAM OF A TARGET FLUID TO A TEMPERATURE LESS THAN OR EQUAL TO 90 K

Title (de)
VORRICHTUNG UND VERFAHREN ZUR VORKÜHLUNG EINES ZIELFLUIDSTROMS AUF EINE TEMPERATUR UNTER ODER GLEICH 90 K

Title (fr)
DISPOSITIF ET PROCEDE DE PRE-REFROIDISSEMENT D'UN FLUX D'UN FLUIDE CIBLE A UNE TEMPERATURE INFERIEURE OU EGALE A 90 K

Publication
EP 4348137 A1 20240410 (FR)

Application
EP 22730920 A 20220531

Priority
• FR 2105723 A 20210531
• EP 2022064796 W 20220531

Abstract (en)
[origin: WO2022253847A1] The device (100) for pre-cooling a stream (101) of a target gas to a temperature less than or equal to 90 K has: - a group (105) of at least two heat exchangers (106, 107, 108, 136) for exchanging heat between the stream of target gas, a stream (102) of a first cooling fluid and at least one stream chosen from a stream of a second cooling fluid and a stream of a third cooling fluid, - a closed circuit (110) for circulation of a stream of a second cooling fluid, said fluid comprising at least methane, said circuit having: - at least one compression stage (111, 112), - at least one liquid-gas separation stage (115, 116), and - at least one expansion stage (120, 121, 122), and - a circuit (125) for circulation of a stream of the third cooling fluid through at least one of the heat exchangers.

IPC 8 full level
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