

Title (en)

COOLING AND/OR LIQUEFYING METHOD AND SYSTEM

Title (de)

VERFAHREN UND SYSTEM ZUR KÜHLUNG UND / ODER VERFLÜSSIGUNG

Title (fr)

PROCÉDÉ ET INSTALLATION DE REFROIDISSEMENT ET/OU DE LIQUÉFACTION

Publication

**EP 4010646 A1 20220615 (FR)**

Application

**EP 20743082 A 20200708**

Priority

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Abstract (en)

[origin: WO2021023457A1] The invention relates to a method for cooling and/or liquefying a user fluid flow, the method using a cooling and/or liquefying system comprising a low-temperature refrigeration device (1), the refrigeration device (1) comprising a working circuit (10) forming a loop and containing a working fluid, the refrigeration device (1) comprising a cooling exchanger (8) intended to extract heat from the user fluid flow by heat exchange with the working fluid circulating in the working circuit (10), the working circuit (10) forming a cycle comprising, in a series: a compression mechanism (2, 3) a cooling mechanism (5), an expansion mechanism (7), and a reheating mechanism (6), the system comprising a pipe (25) for circulation of the user fluid flow to be cooled in heat exchange with the cooling exchanger (8) of the refrigeration device (1), the method comprising a step of cooling a user fluid flow in the cooling exchanger (8) and, after this cooling step, a step of cleaning impurities solidified in the cooling exchanger (8), the cleaning step comprising stopping of the refrigeration device (1) and, simultaneously, circulation of a user fluid flow in the cooling exchanger (8).

IPC 8 full level

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