

Title (en)

VAPOUR-COMPRESSION HEAT PUMP USING A WORKING FLUID AND CO₂

Title (de)

DAMPFKOMPRESSIONSWÄRMEPUMPE MIT VERWENDUNG EINER BETRIEBSFLÜSSIGKEIT UND CO₂

Title (fr)

POMPE À CHALEUR DE COMPRESSION DE VAPEUR UTILISANT UN FLUIDE² DE TRAVAIL ET DU CO₂

Publication

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Application

EP 15858512 A 20151109

Priority

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Abstract (en)

[origin: WO2016076779A1] A method for conversion of a low temperature heat (5) into a high temperature heat (6) employing the use of a working fluid comprising an absorbent for a working gas comprising CO₂ (carbon dioxide) and at least one of an alkali metal hydroxide, ammonia (NH₃) or at least one amine, characterized by the steps of: - a) providing said low temperature heat (5) having a temperature in the range of 20-80 °C, - b) converting said low temperature heat (5) to said high temperature heat (6) having a temperature in the range higher than 80 °C by liberating said working gas by contact said working fluid with said low temperature heat (5), - c) compressing said working gas by a compression device (2), and - d) reacting said working gas with said absorbent immediately after compression, wherein a maximum pressure is below 40 bar, preferably below 20 bar and most preferably below 16 bar.

IPC 8 full level

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