

Title (en)

COOLING PROCESS USING LOW-BOILING GASES AND A DEVICE FOR CARRYING OUT THE PROCESS

Title (de)

KÜHLVERFAHREN MITTELS TIEFSIEDENDER GASE UND VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCEDE DE REFROIDISSEMENT FAISANT APPEL A DES GAZ A BAS POINT D'EBULLITION, ET DISPOSITIF ASSOCIE

Publication

**EP 0839305 A1 19980506 (DE)**

Application

**EP 96926316 A 19960712**

Priority

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Abstract (en)

[origin: WO9704278A1] A process and device are proposed for generating low temperatures using low-boiling gases. Circulating gas is compressed to high pressure by a compressor (1), cooling is done by expansion machines (14), and high-pressure gas cools by releasing its heat in the counterflow heat exchanger (17) while low-pressure gas is heated by heat absorption in the counterflow heat exchanger. At least one component current in part of the circulation undergoes simultaneous work-performing expansion and recuperative heat exchange in the same device (14).

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