

Title (en)  
Method and apparatus for the reliquefaction of a vapour

Title (de)  
Verfahren und Vorrichtung zur Rückverflüssigung eines Gasstromes

Title (fr)  
Procédé et dispositif pour reliquéfier un courant de gaz

Publication  
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Application  
**EP 06352012 A 20060523**

Priority  
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Abstract (en)  
Vapour boiled off from a liquefied natural gas storage tank (10) is compressed in vapour compression stages (40) and (42). The resulting compressed vapour is condensed in a condenser (46) and the condensate returned to the tank (10). The condenser (46) is cooled by means of a working fluid, for example nitrogen, flowing in a Brayton cycle (60). The Brayton cycle includes a heat exchanger (86) which removes heat of compression from the compressed natural gas vapour upstream of its passage through the condenser (46). In addition a part of the working fluid is withdrawn from a region of the Brayton cycle (60) intermediate the working fluid outlet from the condenser (46) and the working fluid inlet to the heat exchanger (86) and the withdrawn working fluid flows through another heat exchanger (88) in which it removes heat of compression from the natural gas vapour intermediate the compression stage (40) and the compression stage (42). The withdrawn working fluid is returned to the Brayton cycle (60).

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