

Title (en)  
METHOD AND APPARATUS FOR COMPRESSING AND COOLING AIR

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR LUFTVERDICHTUNG UND -KÜHLUNG

Title (fr)  
PROCÉDÉ ET APPAREIL DE COMPRESSION ET DE REFROIDISSEMENT D'AIR

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Application  
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Abstract (en)  
[origin: WO2011061459A2] The invention relates to a method for compressing and cooling air upstream from a facility for cryogenic separation of air, with no means for exchange by indirect heat, in which humid air is compressed in a compressor (3), the air compressed in the compressor is cooled in a first exchanger having indirect heat exchange (13), water (11, 19) is recovered from the air upstream and/or downstream from cooling in the first exchanger, the air cooled in the first exchanger is sent to a purification unit (45) in order to produce air purified of carbon dioxide and/or water, the purified air is sent to the cryogenic separation facility, at least one gas is recovered from the cryogenic separation facility, the recovered water is mixed with the gas from the facility, the mixture produced being at a temperature higher than the temperature of solidification of the water in the mixture and the water mixed with the gas is reheated in the first exchanger.

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