

Title (en)  
COMPRESSOR AND METHOD FOR COMPRESSING TECHNICAL GASES

Title (de)  
VERDICHTER UND VERFAHREN ZUM VERDICHTEN TECHNISCHER GASE

Title (fr)  
COMPRESSEUR ET PROCÉDÉ POUR COMPRESSER DES GAZ TECHNIQUES

Publication  
**EP 2652331 A1 20131023 (DE)**

Application  
**EP 11794190 A 20111213**

Priority  
• EP 10194703 A 20101213  
• EP 2011072649 W 20111213  
• EP 11794190 A 20111213

Abstract (en)  
[origin: EP2463525A1] Compressor (10) for isothermal compression of technical gases, comprises a compression cylinder (12), in which a technical gas exhibiting impurities is introducible, a displacement fluid that is introducible into the compression cylinder with a compressor pump, where the displacement fluid for at least one impurity of the technical gas exhibits a higher solubility than a main component of the technical gas, an expansion chamber (32) for desorbing the impurities from at least one portion of the displacement fluid, and a purge pump, which is connected with the expansion chamber. Compressor (10) for isothermal compression of technical gases, comprises a compression cylinder (12), in which a technical gas exhibiting impurities is introducible, a displacement fluid that is introducible into the compression cylinder with a compressor pump, where the displacement fluid for at least one impurity of the technical gas exhibits a higher solubility than a main component of the technical gas, an expansion chamber (32) for desorbing the impurities from at least one portion of the displacement fluid, and a purge pump for removing previous impurities present in the gas phase, which is connected with the expansion chamber. An independent claim is also included for isothermal compressing of technical gases, comprising (i) supplying a technical gas having a main component and at least one impurity, into the above compressor, (ii) compressing the technical gas from the displacement fluid, where at least one portion of the impurity is absorbed simultaneously, from the displacement fluid, (iii) and subsequently at least partially desorbing and removing the absorbed impurity in the gas phase, from at least one portion of the displacement fluid.

IPC 8 full level  
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CPC (source: EP US)  
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