Title (en)
SEPARATION OF A GAS MIXTURE

Title (de)
ABSCHEIDUNG EIENS GASGEMISCHES

Title (fr)
SÉPARATION D'UN MÉLANGE GAZEUX

Publication
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Application
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Abstract (en)
[origin: WO2012010819A2] A method is described for use in the separation of carbon dioxide from a gas mixture comprising carbon dioxide. The method includes the steps of: (i) compressing and cooling the gas mixture using a compressor to form a two-phase mixture including liquid carbon dioxide (ii) separating a liquid carbon dioxide stream from the two-phase mixture; and (iii) recirculating at least a part of the liquid carbon dioxide stream and introducing the recirculated liquid stream into a process stream By recirculating separated liquid C02 into an upstream process stream, cooling of the process stream can be obtained. By using the liquid stream, additional cooling is possible as cooling is effected by the evaporation of the liquid C02. Thus the recirculated liquid can be used to reduce the temperature of the process stream.

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