

## Title (en)

GAS MIXTURE SEPARATION APPARATUS AND METHOD FOR SEPARATING AT LEAST ONE MAIN FLUID FROM A GAS MIXTURE

## Title (de)

GASGEMISCH-ZERLEGUNGSANLAGE SOWIE VERFAHREN ZUM ABTRENNEN VON WENIGSTENS EINEM HAUPTFLUID AUS EINEM GASGEMISCH

## Title (fr)

APPAREIL DE SÉPARATION DE MÉLANGE GAZEUX ET PROCÉDÉ POUR SÉPARER AU MOINS UN FLUIDE PRINCIPAL À PARTIR D'UN MÉLANGE GAZEUX

## Publication

**EP 4176218 A1 20230510 (DE)**

## Application

**EP 21740001 A 20210701**

## Priority

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## Abstract (en)

[origin: WO2022003128A1] The invention relates to gas mixture separation apparatus for separating a main fluid, having a start block (12) and an end block (16). The start block (12) has a first heat exchanger (22) and a second heat exchanger (28). Furthermore, a return line (24) is provided for the main fluid separated out in the end block (16), which is operatively coupled to the first heat exchanger (54) of the end block (16) and the first heat exchanger (22) of the start block (12), so that the main fluid draws heat from a process fluid present in the first heat exchanger (22, 54) to cool the process fluid. The second heat exchanger (28) is coupled to a line (32) through which it receives a cooling fluid. The second heat exchanger (28) condenses a separating fluid of a process fluid and separates the separating fluid out. A third heat exchanger (40), separated from the return line, provides for a heat exchange between the process fluid fed to the first heat exchanger (22) of the start block (12) and the separating fluid. Furthermore, a method for separating at least one main fluid from a gas mixture is described.

## IPC 8 full level

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