

Title (en)

METHOD AND APPARATUS FOR AIR SEPARATION BY CRYOGENIC DISTILLATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR LUFTTRENNUNG DURCH KRYOGENE DESTILLATION

Title (fr)

PROCÉDÉ ET APPAREIL POUR LA SÉPARATION DE L'AIR PAR DISTILLATION CRYOGÉNIQUE

Publication

EP 3631327 A1 20200408 (FR)

Application

EP 18736971 A 20180518

Priority

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- FR 2018051201 W 20180518

Abstract (en)

[origin: US2020132367A1] A method for separating air by cryogenic distillation in a system of columns comprising a first column and a second column operating at a lower pressure than the first column, comprising the steps of compressing all of the feed air in a first compressor to a first output pressure of at least 1 bar greater than the pressure of the first column, sending a first portion of the air under the first output pressure to the second compressor, and compressing the air to a second output pressure, cooling and condensing at least a portion of the air under the second output pressure in a heat exchanger, withdrawal of a liquid from a column of the system of columns, pressurising the liquid and evaporating the liquid by heat exchange in the heat exchanger, and pressure reduction of a portion of the compressed air to a second output pressure, at least partially evaporating said air in the heat exchanger, optionally additional heating of said air in the heat exchanger, and sending at least a portion of this air to the second compressor.

IPC 8 full level

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CPC (source: EP RU US)

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Citation (search report)

See references of WO 2018215716A1

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US 12025372 B2 20240702; **US 2020132367 A1 20200430**; CN 110678710 A 20200110; CN 110678710 B 20211210; EP 3631327 A1 20200408; EP 3631327 B1 20210623; FR 3062197 A3 20180727; FR 3062197 B3 20190510; FR 3066809 A1 20181130; FR 3066809 B1 20200131; RU 2019140617 A 20210610; RU 2019140617 A3 20210719; RU 2761562 C2 20211209; WO 2018215716 A1 20181129

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