

Title (en)

CRYOGENIC AIR SEPARATION METHOD, AND AIR SEPARATION PLANT

Title (de)

VERFAHREN ZUR TIEFTEMPERATURZERLEGUNG VON LUFT UND LUFTZERLEGUNGSANLAGE

Title (fr)

PROCÉDÉ DE SÉPARATION CRYOGÉNIQUE D'AIR ET SYSTÈME DE SÉPARATION DE L'AIR

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Application

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Abstract (en)

[origin: WO2018114052A2] The present invention relates to a method for cryogenic air separation using an air separation plant (100) with a distillation column system (10) that comprises a high-pressure column (111) operated at a first pressure level, and a low-pressure column (112) operated at a second pressure level below the first pressure level. According to the invention, air in the air separation plant (100) is used to form one or more gaseous material flows which are subjected to isenthalpic expansion which is carried out starting from the first pressure level or a pressure level that differs from the first pressure level by not more than 1 bar, and through which a pressure difference of 3 to 6 bar is surmounted. The one or more gaseous material flows that is/are subjected to the gaseous expansion comprise a fluid amount of more than 500 standard cubic meters per hour, and the one or more gaseous material flows that is/are subjected to the gaseous expansion have an argon content of not more than 1 mole percent. The invention further relates to an air separation plant (100).

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