Title (en)

Device and process for obtaining gaseous oxygen under high pressure

Title (de)

Vorrichtung und Verfahren zur Erzeugung gasförmigen Sauerstoffs unter erhöhtem Druck

Title (fr)

Dispositif et procédé d'obtention d'oxygène gazeux sous pression

Publication

EP 1319912 A1 20030618 (DE)

Application

EP 02002634 A 20020205

Priority

DE 10161584 A 20011214

Abstract (en)

Device for producing gaseous oxygen under elevated pressure comprises distillation column system consisting of low pressure column arranged above high pressure column; condenser-evaporator having liquefying and evaporation chamber; process air line connected to high pressure column; transfer line for introducing fraction from high pressure into low pressure column; liquid line; and product line. <??>Device for producing gaseous oxygen under elevated pressure comprises a distillation column system consisting of a low pressure column (107) arranged above a high pressure column (106); a condenser-evaporator (102) having a liquefying chamber and an evaporation chamber and arranged below the sump of the low pressure column; a process air line (1-4) connected to the high pressure column; a transfer line (18, 19) for introducing a fraction from the high pressure column into the low pressure column; a liquid line (28) for removing a liquid oxygen fraction from the low pressure column; and a product line (29, 30) for gaseous oxygen under elevated pressure which is connected to the evaporation chamber of the condenser-evaporator. The condenser-evaporator is arranged below the high pressure column. <??>An Independent claim is also included for a process for producing gaseous oxygen under elevated pressure.

Abstract (de)

Die Vorrichtung und das Verfahren dienen zur Erzeugung gasförmigen Sauerstoffs unter erhöhtem Druck. Ein Destilliersäulen-System weist eine Hochdrucksäule (106) und eine Niederdrucksäule (107) auf. Die Niederdrucksäule (107) ist oberhalb der Hochdrucksäule (106) angeordnet. Ein Nebenkondensator (102), der einen Verflüssigungsraum und einen Verdampfungsraum aufweist, ist unterhalb des Sumpfs der Niederdrucksäule (107) angeordnet und dient zur Verdampfung einer flüssigen Sauerstofffraktion aus der Niederdrucksäule (107). Der Nebenkondensator (102) ist unterhalb der Hochdrucksäule (106) angeordnet. <IMAGE>

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