

Title (en)

METHOD AND DEVICE FOR CREATING A PRESSURISED GAS PRODUCT BY THE CRYOGENIC DECOMPOSITION OF AIR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GEWINNUNG EINES DRUCKGASPRODUKTS DURCH TIEFTEMPATURZERLEGUNG VON LUFT

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION D'UN PRODUIT DE GAZ SOUS PRESSION PAR DECOMPOSITION A BASSE TEMPERATURE D'AIR

Publication

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Application

EP 15001884 A 20150625

Priority

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Abstract (en)

[origin: CN105241178A] The invention relates to a method and a device for creating a pressurised gas product(72;73) by the cryogenic decomposition of air in a distillation column system, wherein the distillation column system comprises a high-pressure column (21) and a low-pressure column (22). The entire feed air is compressed in a main air compressor (2) to a first pressure. A first product flow (69; 75) is removed from the distillation column system in the liquid state, subjected to a pressure increase (71; 76) to a first product pressure, evaporated or pseudo-evaporated and heated in the main heat exchanger (13), and obtained as a first compressed-gas product (GOX IC; GAN IC). A third partial flow (37) is depressurized in the second air compressor (38) to a pressure which is at least 1bar higher than the operation pressure of the high-pressure column (21). The first part (339) of the third partial flow which works and is depressurized is continuously cooled, liquefied and then depressurized and led to the distillation column system.

IPC 8 full level

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CPC (source: EP US)

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Citation (opposition)

Opponent : **AIR LIQUIDE**

- US 5475980 A 19951219 - GRENIER MAURICE [US], et al
- FR 2776760 A1 19991001 - AIR LIQUIDE [FR]

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