

Title (en)

System and process for rejecting into air residual gases from air distillation or air liquefaction plants

Title (de)

Vorrichtung und Verfahren zum Einleiten von aus Luftzerlegung- oder Luftverflüssigungsanlage hergestellten Abgasen in die Luft

Title (fr)

Installation et procédé de mise à l'air des gaz résiduels des unités de distillation ou de liquéfaction d'air

Publication

**EP 1199533 A1 20020424 (FR)**

Application

**EP 01402540 A 20011002**

Priority

FR 0013382 A 20001019

Abstract (en)

The installation has a residual gas outlet chimney (2) for intermittent release of oxygen into the atmosphere, equipped with a system (13, 15) for mixing the oxygen with an inert gas to reduce the concentration of oxygen in the emitted gases. The inert gas, e.g. nitrogen, argon, air or a mixture of these, is mixed with the oxygen at a lower density than the oxygen and at the same temperature and pressure. The installation has a quasi-permanent evacuation chamber (13) for the inert gas, forming part of a nitrogen/water tower (1), and a connector (15) linking the chamber to the outlet chimney (2). Apart from the connector (15), the tower is separated from the chimney by a partition (3), and the chimney has a set of nozzles (25) through which gases injected at the bottom of the chimney have to pass, the top of the nozzles being below the level of the top of the connector (15). At the outlet from the chimney the mixture of oxygen and inert gases achieves a speed of 7 - 20 m/s.

Abstract (fr)

Pour réduire le taux de concentration en oxygène des gaz résiduels émis par la cheminée de telles installations, selon l'invention, des moyens de liaison (15) relient les espaces internes respectifs d'une enceinte (13) d'évacuation de gaz inerte miscible avec l'oxygène et de plus faible densité que l'air, tel que l'azote, et de la cheminée (2) ; ainsi, on mélange ce gaz inerte et au moins l'oxygène transitant dans la cheminée, et on évacue le mélange obtenu à une vitesse au moins égale à approximativement 7 m/s au niveau de la sortie de la cheminée. Utilisation : sécurisation des unités de distillation ou de liquéfaction d'air. <IMAGE>

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Citation (search report)

- [A] US 5481880 A 19960109 - GUILLARD ALAIN [FR], et al
- [A] EP 1043557 A2 20001011 - AIR LIQUIDE [FR]
- [A] US 5146756 A 19920915 - LAVIN JOHN T [GB]

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