Title (en)

METHOD FOR EXTRACTING XENON

Title (de)

VERFAHREN ZUR XENONGEWINNUNG

Title (fr)

PROCEDE D'EXTRACTION DE XENON

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9961853A1] The invention relates to a method for extracting xenon and eventually also krypton from a liquid oxygen (LOX) charge, as it accrues in a cryogenic air separation system (LZA) during a rectification of the air, mostly as a bottom product of a low-pressure column, namely with xenon (Xe), krypton (Kr) and hydrocarbons (CxHy) in a small concentration and approximately 99 mol % oxygen (O2). According to the inventive method, the LOX charge is fed to a first column, the oxygen of the LOX charge is extensively removed by stripping with an inert gas, and is extracted in the top gas, whereas the inert gas is withdrawn in the form of a liquid from the bottom of the first column with little O2 and nearly the total mass of CxHy, Kr, Xe. According to the invention, the liquid discharge is fed to a second column without prior catalytic and/or adsorptive removal of CxHy. A Kr fraction is extracted as top gas of the second column, and an Xe fraction is withdrawn from the bottom of the second column. The method can be used in a device for extracting Xe and/or Kr in an air separation system (LZA). The device can be arranged in a transportable container.

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See references of WO 9961853A1

Cited by

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