

Title (en)

PROCESS AND APPARATUS FOR AT LEAST PARTIALLY REMOVING NITROGEN OXIDES FROM OXYGEN-CONTAINING GAS STREAMS

Title (de)

VERFAHREN UND ANLAGE ZUR ABREICHERUNG VON STICKOXIDEN AUS SAUERSTOFFHALTIGEN GASSTRÖMEN

Title (fr)

PROCÉDÉ ET INSTALLATION D'APPAUVRISSEMENT EN OXYDES D'AZOTE DE COURANTS GAZEUX CONTENANT DE L'OXYGÈNE

Publication

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Application

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Priority

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Abstract (en)

[origin: CA2828440A1] The invention relates to a process for at least partially removing NO and NO₂ from an oxygen-containing gas stream, which comprises a scrubbing step in which the gas stream is brought into contact with an ammonia-containing scrubbing solution, NO is oxidized to NO₂ by the oxygen present at a pressure of at least 2 bar and at temperatures of from 15°C to 60°C and at least part of the NO₂ present in the gas stream is converted into ammonium nitrite by the ammonia-containing scrubbing solution, and a subsequent decomposition step in which the ammonium nitrite present in the scrubbing solution is thermally decomposed into elemental nitrogen and water, where the decomposition step is carried out at temperatures of from 121°C to 190°C and a pressure of from 2 to 40 bar. The invention likewise relates to an apparatus for operating the process of the invention.

IPC 8 full level

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