

Title (en)
GAS STREAM PURIFICATION METHOD

Title (de)
GASSTROMREINIGUNGSVERFAHREN

Title (fr)
PROCEDE D'EPURATION DE FLUX GAZEUX

Publication
EP 1880155 A2 20080123 (EN)

Application
EP 06750633 A 20060419

Priority
• US 2006014639 W 20060419
• US 11183705 A 20050422

Abstract (en)
[origin: US2006236719A1] A method of purifying a gas stream by removing oxygen from the gas stream in which the gas stream is introduced into a series of electrically driven oxygen separation zones that separate the oxygen from the gas stream. Each of the electrically driven oxygen separation zones has an electrolyte that conducts oxygen ions upon the application of the voltage to electrodes sandwiching the electrolyte. The voltage applied to each of the electrodes of the separation zones is selected such that an ionic current induced in the electrolyte within a particular zone that is no greater than a limiting current. When voltage is applied in such manner, the electrical power that is consumed is reduced over the power that would otherwise be consumed had a constant voltage been applied to all zones. The gas stream can be a crude argon stream obtained from a crude argon column or a crude nitrogen stream obtained from a pressure swing adsorption unit or a polymeric membrane unit.

IPC 8 full level
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DOCDB simple family (publication)
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