

Title (en)

A process and an apparatus for fractionating gas mixtures.

Title (de)

Verfahren und Vorrichtung zur Fraktionierung von Gasmischungen.

Title (fr)

Procédé et dispositif pour fractionner des mélanges de gaz.

Publication

EP 0000521 A1 19790207 (EN)

Application

EP 78100397 A 19780714

Priority

US 81663977 A 19770718

Abstract (en)

A process and an apparatus for fractionating gas mixtures by adsorbing a first gas from a mixture thereof with a second gas, to reduce the concentration of the first gas in the mixture to below a desired maximum concentration, in which the adsorption cycle is timed according to the rate of fill through an orifice of a space of predetermined volume by withdrawing a portion of effluent gas, feeding such effluent gas portion into a space of predetermined volume through an adjustable orifice, accumulating the withdrawn effluent gas in the space, and discontinuing the adsorption cycle when the volume and/or pressure of accumulated effluent gas in the space reaches or exceeds a predetermined minimum, thereby making it possible to control the cycling independently of any external control or power source.

IPC 1-7

B01D 53/04

IPC 8 full level

B01D 53/04 (2006.01)

CPC (source: EP)

B01D 53/04 (2013.01); **B01D 53/0454** (2013.01); **B01D 53/261** (2013.01); **B01D 2253/106** (2013.01); **B01D 2256/10** (2013.01); **B01D 2256/12** (2013.01); **B01D 2256/24** (2013.01); **B01D 2257/102** (2013.01); **B01D 2257/104** (2013.01); **B01D 2259/40088** (2013.01); **B01D 2259/402** (2013.01)

Citation (search report)

[A] US 3659399 A 19720502 - KAUER GEORGE C JR, et al

Cited by

EP0925821A3

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

EP 0000521 A1 19790207; DE 2857025 A1 19791108; FR 2424057 A1 19791123; FR 2424057 B1 19821029; GB 2040719 A 19800903; GB 2040719 B 19820915; IT 1107774 B 19851125; IT 7850336 A0 19780717; JP S5421964 A 19790219; NL 7815004 A 19790731; SE 7905504 L 19790621

DOCDB simple family (application)

EP 78100397 A 19780714; DE 2857025 A 19780714; FR 7907272 A 19790321; GB 7912431 A 19780714; IT 5033678 A 19780717; JP 8762178 A 19780718; NL 7815004 A 19780714; SE 7905504 A 19790621