

Title (en)
RECOVERY OF PERFLUORINATED COMPOUNDS AND HYDROFLUOROCARBON GASES USING MOLECULAR SIEVE MEMBRANES

Title (de)
RÜCKGEWINNUNG VON PERFLUORINIERTEN BESTANDTEILEN UND FLUORKOHLLENWASSERSTOFFGASEN DURCH VERWENDUNG VON MOLEKULAREN SIEBMEMBRANEN

Title (fr)
RECUPERATION DE COMPOSES PERFLUORES ET MEMBRANES A TAMIS MOLECULAIRE METTANT EN OEUVRE DES GAZ HYDROFLUOROCARBONES

Publication
EP 0971785 A4 20000503 (EN)

Application
EP 98900980 A 19980122

Priority
• IL 9800030 W 19980122
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Abstract (en)
[origin: WO9832521A1] A method is proposed to recover and concentrate perfluorinated compounds and hydrofluorocarbon gases from effluent gases in manufacturing processes. The method involves contacting the gas with a membrane module equipped with inorganic, molecular sieve membranes and applying a pressure difference across the membrane by compressing the feed gas or applying a vacuum to the permeate or both. The PFC and HFC gases are retained to a very high degree, achieving higher concentrations of PFC and HFC components while reducing the size of or eliminating the need for complementary processes to scavenge the PFC and HFC gases that would otherwise pass through the membrane to the permeate side.

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B01D 53/22; **C01B 17/45**

IPC 8 full level
B01D 53/22 (2006.01); **B01D 71/02** (2006.01); **C01B 9/08** (2006.01); **C01B 31/02** (2006.01); **C01B 37/00** (2006.01); **C07C 17/38** (2006.01); **C07C 19/08** (2006.01)

CPC (source: EP)
B01D 53/228 (2013.01); **C07C 17/38** (2013.01); **B01D 2257/204** (2013.01); **B01D 2257/2066** (2013.01); **Y02C 20/30** (2013.01); **Y02P 20/151** (2015.11); **Y02P 20/155** (2015.11)

Citation (search report)
• [A] EP 0754487 A1 19970122 - AIR LIQUIDE [FR]
• [A] WO 9015662 A1 19901227 - DU PONT CANADA [CA], et al
• [A] DATABASE WPI Section Ch Week 9252, Derwent World Patents Index; Class A88, AN 92-427681, XP002016819
• [A] DATABASE WPI Section Ch Week 8640, Derwent World Patents Index; Class A14, AN 86-260855, XP002016820
• See references of WO 9832521A1

Cited by
CN109381973A

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WO 9832521 A1 19980730; AU 5677098 A 19980818; CA 2275960 A1 19980730; EP 0971785 A1 20000119; EP 0971785 A4 20000503; JP 2001510395 A 20010731; NO 993431 D0 19990712; NO 993431 L 19990920

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