

Title (en)

Use of hydrofluoroalkenes as cleaning agents and compositions containing them

Title (de)

Verwendung von Hydrofluoroalkenen als Reinigungsmittel und dene enthaltende Zusammensetzungen

Title (fr)

Utilisation d'hydrofluoroalcènes comme agents de nettoyage, et compositions utilisables à cet effet

Publication

EP 0731162 A1 19960911 (FR)

Application

EP 96400269 A 19960209

Priority

FR 9502752 A 19950309

Abstract (en)

Use of hydrofluoroalkanes of formula Rf(CH₂CF₂)_nCH=CF₂ (I), where n = 1 or 2 and Rf = 1-3C perfluoroalkyl, as agents for cleaning solid surfaces, is new. Also claimed are compsns. for cleaning solid surfaces, comprising a cpd. (I) and a normally liq. organic solvent. (I) are described in US3106589 and 3116337.

Abstract (fr)

Pour remplacer le 1,1,2-trichloro-1,2,2-trifluoroéthane (F 113) ou le 1,1-dichloro-1-fluoroéthane (F141b) dans leurs applications au nettoyage de surfaces solides, l'invention propose d'utiliser un hydrofluoroalcène de formule générale: RF-(CH₂-CF₂)_n-CH = CF₂ dans laquelle n est égal à 1 ou 2 et RF représente un radical perfluoroalkyle. Les hydrofluoroalcènes ne sont pas susceptibles de dégrader l'ozone stratosphérique.

IPC 1-7

C11D 7/50; C23G 5/028

IPC 8 full level

C11D 7/26 (2006.01); **C11D 7/30** (2006.01); **C11D 7/32** (2006.01); **C11D 7/50** (2006.01); **C23G 5/02** (2006.01); **C23G 5/028** (2006.01)

CPC (source: EP KR)

C11D 3/24 (2013.01 - KR); **C11D 7/5018** (2013.01 - EP); **C23G 5/02803** (2013.01 - EP)

Citation (search report)

- [A] EP 0443911 A1 19910828 - ATOCHEM ELF SA [FR]
- [A] EP 0525266 A1 19930203 - ATOCHEM ELF SA [FR]
- [A] EP 0431458 A1 19910612 - DAIKIN IND LTD [JP]
- [A] WO 9305002 A2 19930318 - DU PONT [US]
- [A] US 5037573 A 19910806 - MERCHANT ABID N [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 054 (C - 0909) 12 February 1992 (1992-02-12)

Cited by

EP3564349A1; EP3567092A1; EP2287282A3; EP2258819A3; US8907145B2; US6610790B2; US7972524B2; US8821749B2; WO0181464A1; US8299137B2; US8658708B2; US7972525B2; US8262924B2; US8632703B2; WO2007053672A3; WO2007053673A3; US7718089B2; US7846355B2; US8558040B2; US8633339B2; EP2287282B1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IE IT LI NL

DOCDB simple family (publication)

EP 0731162 A1 19960911; AU 4797596 A 19960919; CA 2169818 A1 19960910; CN 1136587 A 19961127; FR 2731436 A1 19960913; FR 2731436 B1 19970430; JP H08253799 A 19961001; KR 960034383 A 19961022; TW 364014 B 19990711

DOCDB simple family (application)

EP 96400269 A 19960209; AU 4797596 A 19960308; CA 2169818 A 19960219; CN 96101888 A 19960308; FR 9502752 A 19950309; JP 4508396 A 19960301; KR 19960006193 A 19960308; TW 85102229 A 19960227