

Title (en)

AZEOTROPIC COMPOSITIONS COMPRISING FLUORINATED OLEFINS FOR CLEANING APPLICATIONS

Title (de)

AZEOTROPISCHE ZUSAMMENSETZUNGEN MIT FLUORIERTEN OLEFINEN FÜR REINIGUNGZWECKE

Title (fr)

COMPOSITIONS AZÉOTROPIQUES COMPRENANT DES OLÉFINES FLUORÉES POUR DES APPLICATIONS DE NETTOYAGE

Publication

**EP 2179020 A1 20100428 (EN)**

Application

**EP 07837419 A 20070829**

Priority

- US 2007018898 W 20070829
- US 96592007 P 20070823

Abstract (en)

[origin: WO2009025647A1] The present invention relates to azeotropic or azeotrope-like compositions comprising a fluorinated olefin having the formula E- or Z- C<sub>3</sub>F<sub>7</sub>CH=CHC<sub>3</sub>F<sub>7</sub>, and at least one alcohol, halocarbon, hydrofluorocarbon, fluoroether, or alkanes and combinations thereof. In one embodiment, the one compound selected from the group consisting of alcohols, halocarbons, fluoroalkyl ethers, hydrofluorocarbons, alkanes is either methanol, ethanol, iso-propanol, n-propanol, trans-1,2-dichloroethylene, cis-1,2-dichloroethylene, n-propyl bromide, C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub>, C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub>, HFC-43-10mee, HFC-365mfc, heptane, or combinations thereof. In another embodiment, these compositions are useful in cleaning applications as a degreasing agent or defluxing agent for removing oils and/or other residues from a surface.

IPC 8 full level

**C11D 7/50** (2006.01); **C11D 11/00** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP KR)

**C11D 7/504** (2013.01 - EP); **C11D 7/505** (2013.01 - EP KR); **C11D 7/5054** (2013.01 - EP KR); **C11D 7/5063** (2013.01 - EP KR); **C11D 7/5072** (2013.01 - EP KR); **C11D 7/509** (2013.01 - EP KR); **C11D 17/0043** (2013.01 - EP KR); **C11D 2111/16** (2024.01 - EP KR); **C11D 2111/22** (2024.01 - EP KR)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**WO 2009025647 A1 20090226**; CN 101784650 A 20100721; EP 2179020 A1 20100428; JP 2010536985 A 20101202; KR 20100063080 A 20100610

DOCDB simple family (application)

**US 2007018898 W 20070829**; CN 200780100308 A 20070829; EP 07837419 A 20070829; JP 2010521822 A 20070829; KR 20107006248 A 20070829