

Title (en)  
HALOGENATED HYDROCARBON REFRIGERANT COMPOSITIONS CONTAINING HYDROCARBON OIL-RETURN AGENTS

Title (de)  
HALOGENIERTE KOHLENWASSERSTOFF-KÜHLMITTELZUSAMMENSETZUNGEN ENTHALTEND ÖLRÜCKFÜHRUNGSMITTEL

Title (fr)  
COMPOSITIONS DE FLUIDES FRIGORIGENES HALOCARBONES CONTENANT DES AGENTS HYDROCARBONES DE RETOUR D'HUILE

Publication  
**EP 1151054 A1 20011107 (EN)**

Application  
**EP 99934019 A 19990714**

Priority

- US 9915935 W 19990714
- US 23184799 A 19990115
- US 35171099 A 19990712

Abstract (en)  
[origin: WO0042118A1] Refrigerant compositions containing hydrocarbon oil-return agents which solubilize mineral and synthetic oil lubricants with hydrofluorocarbon and hydrofluorocarbon/hydrochlorofluorocarbon-based refrigerants are disclosed. These hydrocarbon oil-return agents, having seven through sixteen carbon atoms, as a small proportion of an overall refrigerant composition, permit efficient return of mineral and synthetic oil lubricants from non-compressor zones back to a compressor zone in a refrigeration system operating with hydrofluorocarbon and hydrofluorocarbon/hydrochlorofluorocarbon-based refrigerants.

IPC 1-7  
**C09K 5/04**; **C10M 127/02**; **C10N 40/30**

IPC 8 full level  
**F25B 1/00** (2006.01); **C09K 5/04** (2006.01); **C10M 101/02** (2006.01); **C10M 105/04** (2006.01); **C10M 105/06** (2006.01); **C10M 107/02** (2006.01); **C10M 121/02** (2006.01); **C10M 127/02** (2006.01); **C10M 169/04** (2006.01); **C10N 40/30** (2006.01)

CPC (source: EP)  
**C09K 5/045** (2013.01); **C09K 2205/122** (2013.01); **C09K 2205/22** (2013.01)

Citation (search report)  
See references of WO 0042118A1

Designated contracting state (EPC)  
DE ES FR GB IT NL

DOCDB simple family (publication)  
**WO 0042118 A1 20000720**; AU 4994299 A 20000801; AU 772143 B2 20040408; BR 9917321 A 20020423; CA 2359090 A1 20000720; CN 1210368 C 20050713; CN 1333806 A 20020130; EP 1151054 A1 20011107; JP 2002534578 A 20021015

DOCDB simple family (application)  
**US 9915935 W 19990714**; AU 4994299 A 19990714; BR 9917321 A 19990714; CA 2359090 A 19990714; CN 99815670 A 19990714; EP 99934019 A 19990714; JP 2000593677 A 19990714