

Title (en)

Use of additives for mineral oils with modified pour- point characteristics

Title (de)

Verwendung von Additiven für Mineralöle mit stockpunktverbessernder Wirkung

Title (fr)

Utilisation d'additifs pour huiles minérales ayant des caractéristiques modifiant le point d'écoulement

Publication

**EP 0236844 B1 19970924 (DE)**

Application

**EP 87102629 A 19870224**

Priority

DE 3607444 A 19860307

Abstract (en)

[origin: US4867894A] Polymers adaptable to use as pour point lowering additives for petroleum oils, said polymers comprising as comonomers therein (a) from 10 to 30 mole percent of methyl methacrylate, (b) from 10 to 70 mole percent of alkyl methacrylates having linear alkyl groups with from 16 to 30 carbon atoms in the alkyl group, (c) from 10 to 80 mole percent of alkyl methacrylates having linear alkyl groups with from 4 to 15 carbon atoms in the alkyl group and/or having branched alkyl groups with from 4 to 40 carbon atoms in the alkyl group, (d) from 0 to 30 mole percent of a free-radically polymerizable nitrogen-containing monomer having dispersing action, and petroleum oils containing such polymers as pour point lowering additives.

IPC 1-7

**C10L 1/18; C10L 1/22; C10M 145/14; C10M 149/04**

IPC 8 full level

**C08F 220/10** (2006.01); **C08F 220/12** (2006.01); **C08L 91/00** (2006.01); **C08L 91/08** (2006.01); **C10L 1/18** (2006.01); **C10L 1/196** (2006.01); **C10L 1/22** (2006.01); **C10L 1/236** (2006.01); **C10M 145/14** (2006.01); **C10M 149/02** (2006.01); **C10M 149/04** (2006.01); **C10M 149/06** (2006.01); **C10N 30/02** (2006.01)

CPC (source: EP US)

**C10L 1/1963** (2013.01 - EP US); **C10L 1/236** (2013.01 - EP US); **C10L 10/16** (2013.01 - EP US); **C10M 145/14** (2013.01 - EP US); **C10M 149/02** (2013.01 - EP US); **C10M 149/06** (2013.01 - EP US); **C10M 149/10** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10M 2217/02** (2013.01 - EP US); **C10M 2217/023** (2013.01 - EP US); **C10M 2217/024** (2013.01 - EP US); **C10M 2217/028** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US)

Cited by

DE10015541A1; DE10015552A1; US5955405A; RU2650526C2; DE10015537A1; FR2601029A1; US6255261B1; WO2013076424A1; US6403746B1; US6391996B1; US6403745B1; WO2013160228A1; WO2014067748A1; US9957342B2; WO2014067749A1

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

**EP 0236844 A2 19870916; EP 0236844 A3 19880330; EP 0236844 B1 19970924;** DE 3607444 A1 19870910; DE 3752119 D1 19971030; JP S62212497 A 19870918; US 4867894 A 19890919

DOCDB simple family (application)

**EP 87102629 A 19870224;** DE 3607444 A 19860307; DE 3752119 T 19870224; JP 4693587 A 19870303; US 18531788 A 19880420