

Title (en)

Lubricating oil composition containing combination of succinimide and mannich base dispersants.

Title (de)

Schmierölszusammensetzung, die ein Gemisch von Bernsteinsäureimide- und Mannichbase-Dispergiermitteln enthalten.

Title (fr)

Composition d'huile lubrifiante contenant une combinaison de dispersants à base de succinimide de base de mannich.

Publication

**EP 0454380 A1 19911030 (EN)**

Application

**EP 91303538 A 19910419**

Priority

US 51149590 A 19900420

Abstract (en)

Effective prevention of low temperature sludge formation and significantly reduced wear is obtained utilizing a lubricating oil composition having a combination dispersant of a hydrocarbon-substituted succinimide and a Mannich condensation product.

IPC 1-7

C10M 163/00; C10N 20/04; C10N 30/04; C10N 60/00; C10N 60/12; C10N 60/14

IPC 8 full level

**C10M 163/00** (2006.01); **C10M 165/00** (2006.01); C10N 30/04 (2006.01); C10N 30/06 (2006.01)

CPC (source: EP)

**C10M 133/56** (2013.01); **C10M 159/16** (2013.01); **C10M 163/00** (2013.01); C10M 2207/026 (2013.01); C10M 2207/027 (2013.01); C10M 2207/028 (2013.01); C10M 2207/125 (2013.01); C10M 2207/129 (2013.01); C10M 2207/144 (2013.01); C10M 2207/146 (2013.01); C10M 2207/262 (2013.01); C10M 2209/084 (2013.01); C10M 2209/103 (2013.01); C10M 2209/108 (2013.01); C10M 2211/022 (2013.01); C10M 2211/06 (2013.01); C10M 2215/04 (2013.01); C10M 2215/064 (2013.01); C10M 2215/08 (2013.01); C10M 2215/082 (2013.01); C10M 2215/26 (2013.01); C10M 2215/28 (2013.01); C10M 2217/042 (2013.01); C10M 2217/043 (2013.01); C10M 2217/046 (2013.01); C10M 2217/06 (2013.01); C10M 2219/00 (2013.01); C10M 2219/02 (2013.01); C10M 2219/022 (2013.01); C10M 2219/024 (2013.01); C10M 2219/044 (2013.01); C10M 2219/046 (2013.01); C10M 2219/068 (2013.01); C10M 2219/087 (2013.01); C10M 2219/088 (2013.01); C10M 2219/089 (2013.01); C10M 2223/045 (2013.01); C10M 2227/061 (2013.01); C10M 2229/02 (2013.01); C10M 2229/05 (2013.01); C10N 2010/04 (2013.01); C10N 2070/02 (2020.05)

Citation (search report)

- [YD] EP 0061346 A2 19820929 - COOPER EDWIN INC [US]
- [Y] GB 1000883 A 19650811 - EXXON RESEARCH ENGINEERING CO
- [A] FR 2354380 A1 19780106 - CHEVRON RES [US]

Cited by

EP0537386A1; EP0556791A1; US5326488A; US5811377A; EP1138753A3; EP0537387A1; US5505868A; US5468403A; US5527478A; EP0516461A1; AU657528B2

Designated contracting state (EPC)

BE DE ES FR GB IT

DOCDB simple family (publication)

**EP 0454380 A1 19911030**; AU 7520091 A 19911024; CA 2040539 A1 19911021; JP H0525487 A 19930202

DOCDB simple family (application)

**EP 91303538 A 19910419**; AU 7520091 A 19910418; CA 2040539 A 19910416; JP 11549191 A 19910419