

Title (en)

LUBRICANT COMPOSITION WITH STABILIZED METAL DETERGENT ADDITIVE AND FRICTION REDUCING ESTER COMPONENT

Publication

EP 0041851 B1 19840321 (EN)

Application

EP 81302518 A 19810605

Priority

US 15722580 A 19800609

Abstract (en)

[origin: EP0041851A2] Oils with metal sulfonate or sulfurized phenate detergents and friction reducing dicarboxylic esters are stabilized against haze or sediment formation by treatment of this oil solution of metal additive, prior to ester incorporation, with a phosphosulfurized polyisobutylene or a polyisobutenyl succinic anhydride at 55 DEG to 225 DEG C for 2-30 hours.

IPC 1-7

C10M 1/08

IPC 8 full level

C10M 159/12 (2006.01); **C10M 159/20** (2006.01); **C10M 163/00** (2006.01); **C10M 177/00** (2006.01); **C10N 10/04** (2006.01); **C10N 30/00** (2006.01); **C10N 30/04** (2006.01); **C10N 30/06** (2006.01); **C10N 70/00** (2006.01)

CPC (source: EP)

C10M 159/20 (2013.01); **C10M 163/00** (2013.01); **C10M 177/00** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/287** (2013.01); **C10M 2207/288** (2013.01); **C10M 2207/289** (2013.01); **C10M 2207/34** (2013.01); **C10M 2209/103** (2013.01); **C10M 2209/104** (2013.01); **C10M 2209/109** (2013.01); **C10M 2219/046** (2013.01); **C10M 2219/087** (2013.01); **C10M 2219/088** (2013.01); **C10M 2219/089** (2013.01); **C10M 2225/041** (2013.01)

Cited by

EP0323087A1; EP1710294A1; EP0294096A1; US4938880A; US5312554A; US5451333A; CN115335495A; US10336954B2; US8703673B2; WO2008128657A3

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0041851 A2 19811216; **EP 0041851 A3 19820203**; **EP 0041851 B1 19840321**; BR 8103615 A 19820302; CA 1159045 A 19831220; DE 3162777 D1 19840426; JP S5723692 A 19820206

DOCDB simple family (application)

EP 81302518 A 19810605; BR 8103615 A 19810608; CA 378153 A 19810522; DE 3162777 T 19810605; JP 8701081 A 19810608