

Title (en)

Synergistic combination of additives useful in power transmitting compositions.

Title (de)

Synergetische Additivzusammensetzung, verwendbar in Kraftübertragungszusammensetzungen.

Title (fr)

Combinaison synergique d'additifs utile dans les compositions de transmission de puissance.

Publication

EP 0348236 A2 19891227 (EN)

Application

EP 89306420 A 19890623

Priority

US 21142888 A 19880624

Abstract (en)

A mutually compatible combination of additives and their use to impart anti-wear, dispersancy and friction modification to power transmission compositions, particularly automatic transmission fluids, is disclosed. The additives comprise organic phosphite ester such as dioleoyl monohydrogenphosphite; hydroxyl amine compound, such N-octadecyl diethanolamine, N-octadecyloxypropyldiethanol amine, or N-octadecylthiopropyl diethanolamine, and dispersant such as that derived by reacting a polyisobutenyl succinimide with a phosphosulfurized terpene, either alone or in combination with a borated, aminated dispersant such as that derived by reacting a polyisobutenyl succinimide with boric acid.

IPC 1-7

C10M 141/10; C10M 141/12; C10M 163/00; C10N 30/06; C10N 40/04; C10N 60/12

IPC 8 full level

C10L 1/14 (2006.01); **C10M 141/10** (2006.01); **C10M 141/12** (2006.01); **C10M 159/12** (2006.01); **C10M 163/00** (2006.01); **C10L 1/22** (2006.01); **C10L 1/24** (2006.01); **C10L 1/26** (2006.01); **C10N 30/06** (2006.01); **C10N 40/04** (2006.01)

CPC (source: EP)

C10L 1/14 (2013.01); **C10L 10/04** (2013.01); **C10L 10/08** (2013.01); **C10M 133/08** (2013.01); **C10M 133/52** (2013.01); **C10M 135/24** (2013.01); **C10M 137/02** (2013.01); **C10M 141/10** (2013.01); **C10M 141/12** (2013.01); **C10M 159/12** (2013.01); **C10M 159/123** (2013.01); **C10M 163/00** (2013.01); **C10L 1/2225** (2013.01); **C10L 1/2383** (2013.01); **C10L 1/2406** (2013.01); **C10L 1/2641** (2013.01); **C10M 2215/042** (2013.01); **C10M 2215/24** (2013.01); **C10M 2219/084** (2013.01); **C10M 2223/02** (2013.01); **C10M 2223/04** (2013.01); **C10M 2223/042** (2013.01); **C10M 2223/049** (2013.01); **C10M 2223/10** (2013.01); **C10M 2223/12** (2013.01); **C10M 2223/121** (2013.01); **C10M 2227/00** (2013.01); **C10M 2227/061** (2013.01); **C10N 2040/08** (2013.01); **C10N 2040/25** (2013.01); **C10N 2040/251** (2020.05); **C10N 2040/255** (2020.05); **C10N 2040/28** (2013.01); **C10N 2070/02** (2020.05)

Cited by

EP1516912A3; EP1739159A3; EP1739321A3; EP0593068A1; GB2285056A; GB2285056B; EP0646639A1; US5767044A; GB2257158A; GB2257158B; US5817605A; US10955009B2; US6613722B1; WO9621709A1; WO9839400A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0348236 A2 19891227; **EP 0348236 A3 19900214**; **EP 0348236 B1 19920916**; DE 68902882 D1 19921022; DE 68902882 T2 19930107; JP H0251591 A 19900221

DOCDB simple family (application)

EP 89306420 A 19890623; DE 68902882 T 19890623; JP 15844489 A 19890622