

Title (en)

Improved multifunctional viscosity index modifier additives derived from amido amines.

Title (de)

Multifunktionale Viskositätsindexmodifizierende Additive, hergestellt aus Amidoaminen.

Title (fr)

Additifs à buts multiples pour la modification de l'indice de viscosité dérivés d'amidoamines.

Publication

EP 0400874 A1 19901205 (EN)

Application

EP 90305579 A 19900522

Priority

US 35907089 A 19890530

Abstract (en)

The present invention is directed to a composition of matter useful as a multifunctional viscosity improver-dispersant for oleaginous compositions, particularly lubricating oil compositions, comprising at least one adduct or reaction product of (A) ethylene copolymer, preferably ethylene propylene copolymer of at least 15,000 number average molecular weight grafted with monounsaturated mono- or dicarboxylic acid material; and (B) amidoamine or thioamido-amine comprising reaction product of at least one amine, preferably polyamine, and an alpha, beta-unsaturated compound represented by the formula <CHEM> wherein X is sulfur or oxygen, Y is -OR<4>, -SR<4>, or <CHEM> and R<1>, R<2>, R<3>, R<4> and R<5> are independently selected from hydrogen, hydrocarbyl, and substituted hydrocarbyl. The present invention is also directed to oleaginous compositions and concentrates, particularly lubricating oil compositions and concentrates, containing said nitrogen containing carboxylic acid material grafted high molecular weight ethylene copolymer adduct.

IPC 1-7

C08F 8/00; C10M 133/52; C10M 143/02; C10M 149/22; C10M 151/04; C10M 159/12; C10N 30/02; C10N 30/04; C10N 60/00; C10N 60/10

IPC 8 full level

C10L 1/22 (2006.01); **C10L 1/24** (2006.01); **C10M 133/52** (2006.01); **C10M 143/02** (2006.01); **C10M 149/06** (2006.01); **C10M 149/18** (2006.01); **C10M 151/02** (2006.01); **C10M 159/12** (2006.01)

CPC (source: EP)

C10L 1/221 (2013.01); **C10L 1/2493** (2013.01); **C10M 129/28** (2013.01); **C10M 129/93** (2013.01); **C10M 133/06** (2013.01); **C10M 133/16** (2013.01); **C10M 133/52** (2013.01); **C10M 135/14** (2013.01); **C10M 135/22** (2013.01); **C10M 135/26** (2013.01); **C10M 143/00** (2013.01); **C10M 143/02** (2013.01); **C10M 149/06** (2013.01); **C10M 149/18** (2013.01); **C10M 151/02** (2013.01); **C10M 159/12** (2013.01); **C10M 2205/00** (2013.01); **C10M 2205/02** (2013.01); **C10M 2205/022** (2013.01); **C10M 2207/12** (2013.01); **C10M 2207/129** (2013.01); **C10M 2215/04** (2013.01); **C10M 2215/042** (2013.01); **C10M 2215/08** (2013.01); **C10M 2215/082** (2013.01); **C10M 2215/086** (2013.01); **C10M 2215/12** (2013.01); **C10M 2215/122** (2013.01); **C10M 2215/26** (2013.01); **C10M 2217/00** (2013.01); **C10M 2217/02** (2013.01); **C10M 2217/024** (2013.01); **C10M 2217/04** (2013.01); **C10M 2217/044** (2013.01); **C10M 2217/046** (2013.01); **C10M 2217/06** (2013.01); **C10M 2219/062** (2013.01); **C10M 2219/083** (2013.01); **C10M 2219/085** (2013.01); **C10M 2221/00** (2013.01); **C10M 2221/02** (2013.01); **C10M 2221/04** (2013.01); **C10M 2221/041** (2013.01); **C10M 2221/043** (2013.01); **C10M 2227/00** (2013.01); **C10N 2070/02** (2020.05)

Citation (search report)

- [APD] EP 0319229 A2 19890607 - EXXON CHEMICAL PATENTS INC [US]
- [A] US 2568876 A 19510925 - WHITE RALPH V, et al
- [A] EP 0145369 A2 19850619 - EXXON RESEARCH ENGINEERING CO [US]
- [A] EP 0146162 A2 19850626 - EXXON RESEARCH ENGINEERING CO [US]
- [A] US 4240804 A 19801223 - SHIELDS THEODORE C [US]
- [AD] US 3445441 A 19690520 - RUSHTON BRIAN M
- [A] US 3630902 A 19711228 - COUPLAND KEITH, et al
- [A] US 3448049 A 19690603 - PREUSS ALBERT F, et al

Cited by

US5672573A; CN114875412A; EP0596567A1; US5425888A; US11981876B2; WO2021018467A1

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

EP 0400874 A1 19901205; EP 0400874 B1 19930421; AU 5599290 A 19901206; AU 623525 B2 19920514; BR 9002543 A 19910813; CA 2015063 A1 19901130; DE 69001389 D1 19930527; DE 69001389 T2 19930819

DOCDB simple family (application)

EP 90305579 A 19900522; AU 5599290 A 19900528; BR 9002543 A 19900530; CA 2015063 A 19900420; DE 69001389 T 19900522