

Title (en)

ETHYLENE/ALPHA-OLEFIN/DIENE INTERPOLYMER-SUBSTITUTED CARBOXYLIC ACID DISPERSANT ADDITIVES

Title (de)

MIT CARBONSAÜRE SUBSTITUIERTE ETHYLES/ALPHA-OLEFIN/DIEN INTERPOLYMERE ALS DISPERGIERZUSÄTZE

Title (fr)

ADDITIFS DISPERSANTS A BASE D'INTERPOLYMERES ETHYLENE/ALPHA-OLEFINE/DIENE ET D'ACIDE CARBOXYLIQUE DE SUBSTITUTION

Publication

EP 0900238 A1 19990310 (EN)

Application

EP 96914644 A 19960516

Priority

- CA 2251599 A 19960516
- US 9606993 W 19960516

Abstract (en)

[origin: WO9743322A1] The present invention is directed to an oil-soluble lubricating oil additive comprising at least one terminally unsaturated ethylene/alpha-olefin/diene interpolymer of 300 to 20,000 number average molecular weight substituted with mono- or dicarboxylic acid producing moieties (preferably dicarboxylic acid or anhydride moieties), wherein the terminal unsaturation comprises terminal ethenylidene unsaturation. The mono- and dicarboxylic acid or anhydride substituted interpolymers of this invention are useful <u>per se</u> as additives to lubricating oils, and can also be reacted with a nucleophilic reagent, such as amines, alcohols, amino alcohols and reactive metal compounds, to form products which are also useful lubricating oil additives, e.g., as dispersants.

IPC 1-7

C08F 8/00; C08F 8/46; C08F 210/16; C10M 129/93; C10M 133/52

IPC 8 full level

C10L 1/192 (2006.01); **C08F 4/64** (2006.01); **C08F 8/00** (2006.01); **C08F 8/24** (2006.01); **C08F 8/42** (2006.01); **C08F 8/46** (2006.01); **C08F 210/02** (2006.01); **C08F 210/16** (2006.01); **C08F 210/18** (2006.01); **C08F 220/02** (2006.01); **C08F 222/02** (2006.01); **C08L 23/26** (2006.01); **C10L 1/14** (2006.01); **C10L 1/18** (2006.01); **C10L 1/196** (2006.01); **C10L 1/198** (2006.01); **C10L 1/22** (2006.01); **C10L 1/238** (2006.01); **C10L 1/24** (2006.01); **C10L 10/00** (2006.01); **C10L 10/08** (2006.01); **C10L 10/18** (2006.01); **C10M 129/93** (2006.01); **C10M 129/95** (2006.01); **C10M 133/52** (2006.01); **C10M 133/56** (2006.01); **C10M 143/00** (2006.01); **C10M 143/02** (2006.01); **C10M 143/08** (2006.01); **C10M 145/00** (2006.01); **C10M 145/02** (2006.01); **C10M 145/10** (2006.01); **C10M 159/12** (2006.01); **C10M 161/00** (2006.01); **C10M 171/00** (2006.01); **C10L 1/16** (2006.01); **C10L 1/20** (2006.01); **C10L 1/26** (2006.01); **C10L 1/30** (2006.01); **C10N 20/02** (2006.01); **C10N 20/04** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01)

IPC 8 main group level

C10L (2006.01)

CPC (source: EP)

C08F 8/00 (2013.01); **C08F 8/46** (2013.01); **C10L 1/143** (2013.01); **C10L 1/1963** (2013.01); **C10L 1/1966** (2013.01); **C10L 1/198** (2013.01); **C10L 1/238** (2013.01); **C10L 1/2475** (2013.01); **C10L 10/00** (2013.01); **C10L 10/04** (2013.01); **C10M 129/93** (2013.01); **C10M 129/95** (2013.01); **C10M 133/52** (2013.01); **C10M 133/56** (2013.01); **C10M 143/02** (2013.01); **C10M 159/12** (2013.01); **C10M 171/00** (2013.01); **C08F 210/16** (2013.01); **C10L 1/1608** (2013.01); **C10L 1/1616** (2013.01); **C10L 1/1817** (2013.01); **C10L 1/1832** (2013.01); **C10L 1/201** (2013.01); **C10L 1/221** (2013.01); **C10L 1/2493** (2013.01); **C10L 1/2641** (2013.01); **C10L 1/2691** (2013.01); **C10L 1/303** (2013.01); **C10L 1/306** (2013.01); **C10M 2205/00** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/281** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/283** (2013.01); **C10M 2207/286** (2013.01); **C10M 2207/288** (2013.01); **C10M 2207/289** (2013.01); **C10M 2207/34** (2013.01); **C10M 2209/00** (2013.01); **C10M 2209/02** (2013.01); **C10M 2209/10** (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 2215/26** (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 2221/00** (2013.01); **C10M 2223/045** (2013.01); **C10N 2010/04** (2013.01); **C10N 2020/01** (2020.05); **C10N 2040/00** (2013.01); **C10N 2040/02** (2013.01); **C10N 2040/08** (2013.01); **C10N 2040/25** (2013.01); **C10N 2040/251** (2020.05); **C10N 2040/252** (2020.05); **C10N 2040/253** (2020.05); **C10N 2040/255** (2020.05); **C10N 2040/28** (2013.01); **C10N 2040/30** (2013.01); **C10N 2040/32** (2013.01); **C10N 2040/34** (2013.01); **C10N 2040/36** (2013.01); **C10N 2040/38** (2020.05); **C10N 2040/40** (2020.05); **C10N 2040/42** (2020.05); **C10N 2040/44** (2020.05); **C10N 2040/50** (2020.05); **C10N 2070/02** (2020.05)

Citation (search report)

See references of WO 9743322A1

Cited by

US6295000B1

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

WO 9743322 A1 19971120; CA 2251599 A1 19971120; EP 0900238 A1 19990310

DOCDB simple family (application)

US 9606993 W 19960516; CA 2251599 A 19960516; EP 96914644 A 19960516