Title (en)

Mixture of amines, hydrocarbonpolymers and carrier oils, suitable as fuel and lubricant additive

Title (de)

Als Kraft- und Schmierstoffadditiv geeignete Mischung aus Aminen, Kohlenwasserstoffpolymeren und Trägerölen

Title (fr)

Mélange d'amines, polymères d'hydrocarbures et solvants huileux, convenant comme additif pour combustibles et lubrifiants

Publication

EP 0704519 A1 19960403 (DE)

Application

EP 95114693 A 19950919

Priority

DE 4434603 A 19940928

Abstract (en)

The mixt. (I) useful as fuel and lubricant additive contains: (A) at least one amine having a hydrocarbyl residue with an average mol.wt. of 500-10000; (B) at least one hydrocarbon polymer having an average mol.wt. of 300-10000 and which can exist in (non)-hydrated form; and (c) at least one conventional carrier oil. The wt. ratio of A:B is 80-60:20-40. Also claimed are: (i) fuels for Otto engines contg. 10-5000 ppm (I); and (ii) lubricants contg. 0.1-6 wt.% (I).

Abstract (de)

Als Kraft- und Schmierstoffadditiv geeignete Mischung aus im wesentlichen (A) mindestens einem Amin, welches einen Kohlenwasserstoffrest mit einem mittleren Molekulargewicht von 500 bis 10000 trägt, (B) mindestens einem Kohlenwasserstoffpolymer mit einem mittleren Molekulargewicht von 300 bis 10000, welches in nicht hydrierter oder in hydrierter Form vorliegen kann, und (C) mindestens einem üblichen Trägeröl, gekennzeichnet durch ein Gew.-Verhältnis der Komponente A zur Komponente B von 80:20 bis 60:40.

IPC 1-7

C10L 1/14; C10M 161/00; C10M 157/04; C10M 165/00

IPC 8 full level

C10L 1/14 (2006.01); **C10L 10/00** (2006.01); **C10L 10/02** (2006.01); **C10M 157/04** (2006.01); **C10M 161/00** (2006.01); **C10M 165/00** (2006.01); **C10M 167/00** (2006.01); C10L 1/16 (2006.01); C10L 1/18 (2006.01); C10L 1/22 (2006.01)

CPC (source: EP US)

C10L 1/143 (2013.01 - EP US); **C10L 1/146** (2013.01 - EP US); **C10L 10/02** (2013.01 - EP US); **C10L 10/06** (2013.01 - EP US); **C10L 10/08** (2013.01 - EP US); **C10M 129/34** (2013.01 - EP US); **C10M 129/52** (2013.01 - EP US); **C10M 133/54** (2013.01 - EP US); **C10M 133/58** (2013.01 - EP US); **C10M 143/06** (2013.01 - EP US); **C10M 145/36** (2013.01 - EP US); **C10M 149/14** (2013.01 - EP US); **C10M 159/04** (2013.01 - EP US); **C10M 161/00** (2013.01 - EP US); **C10M 167/00** (2013.01 - EP US); C10L 1/1616 (2013.01 - EP US); C10L 1/1641 (2013.01 - EP US); C10L 1/19 (2013.01 - EP US); C10L 1/1905 (2013.01 - EP US); C10L 1/191 (2013.01 - EP US); C10L 1/1985 (2013.01 - EP US); C10L 1/2225 (2013.01 - EP US); C10L 1/223 (2013.01 - EP US); C10L 1/2283 (2013.01 - EP US); C10L 1/238 (2013.01 - EP US); C10L 1/2383 (2013.01 - EP US); C10M 2203/10 (2013.01 - EP US); C10M 2203/102 (2013.01 - EP US); C10M 2203/104 (2013.01 - EP US); C10M 2203/106 (2013.01 - EP US); C10M 2203/108 (2013.01 - EP US); C10M 2205/02 (2013.01 - EP US); C10M 2205/026 (2013.01 - EP US); C10M 2207/123 (2013.01 - EP US); C10M 2207/142 (2013.01 - EP US); C10M 2207/282 (2013.01 - EP US); C10M 2207/284 (2013.01 - EP US); C10M 2207/285 (2013.01 - EP US); C10M 2207/34 (2013.01 - EP US); C10M 2209/105 (2013.01 - EP US); C10M 2209/106 (2013.01 - EP US); C10M 2209/107 (2013.01 - EP US); C10M 2209/108 (2013.01 - EP US); C10M 2215/04 (2013.01 - EP US); C10M 2215/042 (2013.01 - EP US); C10M 2215/22 (2013.01 - EP US); C10M 2215/221 (2013.01 - EP US); C10M 2215/225 (2013.01 - EP US); C10M 2215/226 (2013.01 - EP US); C10M 2215/26 (2013.01 - EP US); C10M 2215/30 (2013.01 - EP US); C10M 2217/041 (2013.01 - EP US); C10M 2217/046 (2013.01 - EP US); C10M 2217/06 (2013.01 - EP US); C10N 2020/01 (2020.05 - EP US); C10N 2070/02 (2020.05 - EP US)

Citation (applicant)

- EP 0244616 A2 19871111 - BASF AG [DE]
- EP 0356726 B1 19920513
- EP 0374461 A1 19900627 - BASF AG [DE]
- US 5006130 A 19910409 - AIELLO ROBERT P [US], et al
- WO 9103529 A1 19910321 - CHEVRON RES [US]
- J. FALBE, U. HASSERODT: "Katalysatoren, Tenside, Mineraloeladditive", 1978, THIEME VERLAG, STUTTGART, article M. ROSENBECK, pages: 223
- "Ullman's Encyclopedea of Industrial Chemistry", vol. A16, 1990, pages: 719

Citation (search report)

- [X] WO 9113949 A1 19910919 - POLAR MOLECULAR CORP [US]
- [X] EP 0505070 A1 19920923 - TEXACO CHEMICAL [US]
- [X] EP 0530094 A1 19930303 - INST FRANCAIS DU PETROLE [FR]
- [X] WO 9221736 A1 19921210 - LUBRIZOL CORP [US]
- [PX] EP 0628622 A1 19941214 - LUBRIZOL CORP [US]
- [X] EP 0330522 A2 19890830 - EXXON CHEMICAL PATENTS INC [US]
- [X] EP 0462319 A1 19911227 - LUBRIZOL CORP [US]
- [XY] EP 0588429 A1 19940323 - SHELL INT RESEARCH [NL]
- [Y] WO 9202601 A1 19920220 - MOBIL OIL CORP [US]
- [Y] EP 0460957 A2 19911211 - TONEN CORP [JP]
- [DA] DE 3611230 A1 19871008 - BASF AG [DE]
- [DA] EP 0374461 A1 19900627 - BASF AG [DE]

Cited by

US7601185B2; EP1104749A3; EP1277828A3; EP0950704A1; AU744324B2; AU751122B2; AU751122C; US6498129B1; US7226489B2; US7204863B2; WO0014185A1; US7250065B1; US6348075B1; US6840970B2; WO0047698A1; WO0002978A1; WO9940166A1; WO03068895A1; WO0222765A3; WO0185874A3; JP2002536531A

Designated contracting state (EPC)

BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0704519 A1 19960403; **EP 0704519 B1 19990506**; DE 4434603 A1 19960404; DE 59505828 D1 19990610; ES 2131243 T3 19990716; US 6579329 B1 20030617

DOCDB simple family (application)

EP 95114693 A 19950919; DE 4434603 A 19940928; DE 59505828 T 19950919; ES 95114693 T 19950919; US 65054996 A 19960520