

Title (en)
Lubricating oil composition.

Title (de)
Schmierstoffzusammensetzung.

Title (fr)
Composition lubrifiante.

Publication
EP 0356677 A1 19900307 (DE)

Application
EP 89112951 A 19890714

Priority
CH 273788 A 19880718

Abstract (en)
A lubricating oil based on a mineral or synthetic oil is stabilised against oxidative degradation by the addition of a mixture of at least one specific aromatic amine of the formula I or II and at least one sterically hindered amine. The lubricating oil can contain other antioxidants or other additives. It is preferably a motor oil.

Abstract (de)
Ein Schmierstoff auf Basis eines mineralischen oder synthetischen Oeles wird gegen oxidativen Abbau stabilisiert durch Zusatz eines Gemisches aus mindestens einem bestimmten aromatischen Amin der Formel I oder II und mindestens einem sterisch gehinderten Amin. Der Schmierstoff kann weitere Antioxidantien oder sonstige Zusätze enthalten. Bevorzugt handelt es sich um Motorenöle.

IPC 1-7
C10M 133/02; C10M 141/08; C10M 141/10

IPC 8 full level
C10M 129/10 (2006.01); **C10M 133/00** (2006.01); **C10M 133/02** (2006.01); **C10M 133/04** (2006.01); **C10M 133/06** (2006.01); **C10M 133/12** (2006.01); **C10M 133/14** (2006.01); **C10M 133/40** (2006.01); **C10M 135/22** (2006.01); **C10M 137/02** (2006.01); **C10M 137/04** (2006.01); **C10M 141/08** (2006.01); **C10M 141/10** (2006.01); **C10M 141/12** (2006.01); **C10N 30/10** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR US)
C10M 129/10 (2013.01 - EP US); **C10M 133/00** (2013.01 - KR); **C10M 133/02** (2013.01 - EP KR US); **C10M 133/12** (2013.01 - EP US); **C10M 133/14** (2013.01 - EP US); **C10M 133/16** (2013.01 - EP US); **C10M 133/38** (2013.01 - EP US); **C10M 133/40** (2013.01 - EP US); **C10M 133/42** (2013.01 - EP US); **C10M 135/22** (2013.01 - EP US); **C10M 135/26** (2013.01 - EP US); **C10M 135/30** (2013.01 - EP US); **C10M 135/36** (2013.01 - EP US); **C10M 141/08** (2013.01 - EP US); **C10M 141/10** (2013.01 - EP US); **C10M 2207/023** (2013.01 - EP US); **C10M 2207/024** (2013.01 - EP US); **C10M 2207/026** (2013.01 - EP US); **C10M 2207/027** (2013.01 - EP US); **C10M 2207/287** (2013.01 - EP US); **C10M 2215/00** (2013.01 - EP US); **C10M 2215/06** (2013.01 - EP US); **C10M 2215/062** (2013.01 - EP US); **C10M 2215/064** (2013.01 - EP US); **C10M 2215/065** (2013.01 - EP US); **C10M 2215/066** (2013.01 - EP US); **C10M 2215/067** (2013.01 - EP US); **C10M 2215/068** (2013.01 - EP US); **C10M 2215/08** (2013.01 - EP US); **C10M 2215/082** (2013.01 - EP US); **C10M 2215/086** (2013.01 - EP US); **C10M 2215/12** (2013.01 - EP US); **C10M 2215/122** (2013.01 - EP US); **C10M 2215/18** (2013.01 - EP US); **C10M 2215/22** (2013.01 - EP US); **C10M 2215/221** (2013.01 - EP US); **C10M 2215/222** (2013.01 - EP US); **C10M 2215/225** (2013.01 - EP US); **C10M 2215/226** (2013.01 - EP US); **C10M 2215/28** (2013.01 - EP US); **C10M 2215/30** (2013.01 - EP US); **C10M 2217/00** (2013.01 - EP US); **C10M 2217/02** (2013.01 - EP US); **C10M 2217/028** (2013.01 - EP US); **C10M 2217/04** (2013.01 - EP US); **C10M 2217/042** (2013.01 - EP US); **C10M 2217/043** (2013.01 - EP US); **C10M 2217/044** (2013.01 - EP US); **C10M 2217/045** (2013.01 - EP US); **C10M 2217/06** (2013.01 - EP US); **C10M 2219/06** (2013.01 - EP US); **C10M 2219/083** (2013.01 - EP US); **C10M 2219/084** (2013.01 - EP US); **C10M 2219/085** (2013.01 - EP US); **C10M 2219/087** (2013.01 - EP US); **C10M 2219/088** (2013.01 - EP US); **C10M 2219/089** (2013.01 - EP US); **C10M 2219/106** (2013.01 - EP US); **C10M 2219/108** (2013.01 - EP US); **C10M 2223/04** (2013.01 - EP US); **C10M 2223/042** (2013.01 - EP US); **C10M 2223/065** (2013.01 - EP US); **C10M 2227/04** (2013.01 - EP US); **C10N 2040/25** (2013.01 - EP US); **C10N 2040/251** (2020.05 - EP US); **C10N 2040/255** (2020.05 - EP US); **C10N 2040/28** (2013.01 - EP US)

Citation (search report)
• [X] EP 0059168 A1 19820901 - CIBA GEIGY AG [CH]
• [XP] EP 0286595 A2 19881012 - CIBA GEIGY AG [CH]
• [A] WO 8802007 A2 19880324 - LUBRIZOL CORP [US]
• [A] EP 0140362 A2 19850508 - CIBA GEIGY AG [CH]
• [AD] EP 0149422 A2 19850724 - CIBA GEIGY AG [CH]
• [A] EP 0239536 A2 19870930 - CIBA GEIGY AG [CH]
• [A] US 3480635 A 19691125 - ALTWICKER ELMAR R
• [X] EP 0072349 A2 19830216 - CIBA GEIGY AG [CH]

Cited by
US6013704A; EP0406826A1; EP0475904A3; US5268113A; US5773393A; AU2007280548B2; EP0432089A1; US5167844A; US2008294132A1; EP0406825A1; US8809616B2; CN104640961A; EP2885388A4; US9370764B2; US7825134B2; FR2671354A1; GB2253411A; BE1004925A5; US5198130A; GB2253411B; WO2008015116A3; EP2671449A1; US9862909B2; US10081777B2; US7442711B2; US8383648B2; US9688938B2; US9902916B2; US10093879B2

Designated contracting state (EPC)
BE DE ES FR GB IT NL

DOCDB simple family (publication)
EP 0356677 A1 19900307; EP 0356677 B1 19930609; AU 3817489 A 19900118; AU 621910 B2 19920326; BR 8903526 A 19900313; CA 1334532 C 19950221; CN 1020748 C 19930519; CN 1041610 A 19900425; DE 58904610 D1 19930715; ES 2055762 T3 19940901; JP 2832541 B2 19981209; JP H0273894 A 19900313; KR 910003078 A 19910226; KR 970007781 B1 19970516; MX 169536 B 19930709; SU 1736343 A3 19920523; US 5073278 A 19911217; ZA 895408 B 19900328

DOCDB simple family (application)
EP 89112951 A 19890714; AU 3817489 A 19890717; BR 8903526 A 19890718; CA 605711 A 19890714; CN 89104887 A 19890718; DE 58904610 T 19890714; ES 89112951 T 19890714; JP 18586189 A 19890718; KR 890010211 A 19890718; MX 1682889 A 19890717; SU 4614702 A 19890717; US 38056389 A 19890713; ZA 895408 A 19890717