Title (en)

Overbased sulfurized alkyl-phenols as lubricating oil additives.

Title (de)

Überbasisch gemachte, sulfurierte Alkylphenole und ihre Verwendung als Schmieröl-Additive.

Title (fr)

Alkyl phénols soufrés surbasés et leur utilisation comme additifs pour des huiles lubrifiantes.

Publication

EP 0259974 A2 19880316 (EN)

Application

EP 87307025 A 19870807

Priority

US 89459986 A 19860808

Abstract (en)

Oil-soluble hydrolytically stable Group II metal overbased sulfurized alkylphenol reaction products are characterized as possessing a Total Base Number of at least 300 and a viscosity of not more than 800 centistokes at 100 DEG C and containing less than 10 mole percent of unsulfurized Group II metal alkylphenol in the actives. These reaction products, which are useful as lubricating oil additives, are obtained by a process in which the appropriate reactants are reacted together in the presence of a sulfurization catalyst which enables reaction products of such high Total Base Numbers and low viscosities to be obtained.

IPC 1-7

C07C 148/02; C10M 159/22; C10M 159/24; C10N 10/04; C10N 20/02; C10N 30/04; C10N 30/12; C10N 70/00

IPC 8 full level

C07F 3/00 (2006.01); **C07C 27/00** (2006.01); **C07C 37/14** (2006.01); **C07C 39/06** (2006.01); **C07C 39/19** (2006.01); **C07C 67/00** (2006.01); **C07C 313/00** (2006.01); **C07C 323/00** (2006.01); **C07F 3/04** (2006.01); **C10M 159/22** (2006.01); **C10M 159/24** (2006.01); C10N 10/04 (2006.01); C10N 20/02 (2006.01); C10N 30/04 (2006.01); C10N 40/25 (2006.01)

CPC (source: EP KR)

C10M 159/22 (2013.01 - EP KR); **C10M 159/24** (2013.01 - EP KR)

Cited by

US7405185B2

Designated contracting state (EPC)

BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0259974 A2 19880316; **EP 0259974 A3 19880810**; **EP 0259974 B1 19930512**; **EP 0259974 B2 19970326**; AU 602343 B2 19901011; AU 7633487 A 19880211; BR 8704053 A 19880405; CA 1341002 C 20000530; CN 1021345 C 19930623; CN 87105448 A 19880413; DE 3785807 D1 19930617; DE 3785807 T2 19931007; DE 3785807 T3 19970612; DK 410087 A 19880209; DK 410087 D0 19870806; ES 2054677 T3 19940816; IN 170575 B 19920411; JP S6346297 A 19880227; KR 880002818 A 19880511; MX 168483 B 19930526; NO 167659 B 19910819; NO 167659 C 19911127; NO 873316 D0 19870807; NO 873316 L 19880209; NZ 221128 A 19890927; ZA 875686 B 19880427

DOCDB simple family (application)

EP 87307025 A 19870807; AU 7633487 A 19870731; BR 8704053 A 19870807; CA 543119 A 19870728; CN 87105448 A 19870808; DE 3785807 T 19870807; DK 410087 A 19870806; ES 87307025 T 19870807; IN 5MA1988 A 19880105; JP 19798987 A 19870807; KR 870008668 A 19870807; MX 2695587 A 19870807; NO 873316 A 19870807; NZ 22112887 A 19870720; ZA 875686 A 19870731