

Title (en)

Modified dispersant compositions.

Title (de)

Modifizierte Lösungsmittelzusammensetzungen.

Title (fr)

Compositions dispersantes modifiées.

Publication

EP 0460309 A1 19911211 (EN)

Application

EP 90306128 A 19900606

Priority

EP 90306128 A 19900606

Abstract (en)

An oil soluble dispersant composition formed by reacting a basic nitrogen-containing ashless dispersant (i) with at least one dibasic acylating agent and (ii) with at least one boron compound, said reactions (i) and (ii) being conducted concurrently or sequentially in any order such that the initial ashless dispersant is chemically modified via acylation in (i) and by boronation in (ii).

IPC 1-7

C10M 133/56; C10N 30/04; C10N 40/00; C10N 60/00; C10N 60/14

IPC 8 full level

C10M 159/12 (2006.01); **C10L 1/2383** (2006.01); **C10M 125/26** (2006.01); **C10M 129/34** (2006.01); **C10M 129/36** (2006.01);
C10M 133/16 (2006.01); **C10M 133/52** (2006.01); **C10M 133/56** (2006.01); **C10M 133/58** (2006.01); **C10M 139/00** (2006.01);
C10M 159/16 (2006.01); **C10N 30/04** (2006.01); **C10N 60/14** (2006.01); **C10N 70/00** (2006.01)

CPC (source: EP)

C10L 1/2383 (2013.01); **C10M 133/52** (2013.01); **C10M 133/56** (2013.01); **C10M 159/16** (2013.01)

Citation (search report)

- [Y] GB 2083048 A 19820317 - EXXON RESEARCH ENGINEERING CO
- [YD] US 4686054 A 19870811 - WISOTSKY MAX J [US], et al
- [A] US 3723460 A 19730327 - BRANNEN W, et al
- [A] US 3287271 A 19661122 - STUART FRANK A, et al
- [A] FR 1559643 A 19690314
- [A] EP 0310365 A1 19890405 - AMOCO CORP [US]
- [A] WO 8503504 A2 19850815 - LUBRIZOL CORP [US]
- [A] EP 0136185 A2 19850403 - COOPER EDWIN INC [US]
- [A] FR 1443981 A 19660701 - SOCONY MOBIL OIL CO
- [X] DATABASE WPI, no. 76-97150x, Derwent Publications Ltd, London, GB; & JP-A-51 130 408 (KARONAITO KAGAKU K.K.) 13-11-1976

Cited by

EP0663436A1; EP0733697A1; CN1081229C; FR2747687A1; BE1011443A4; FR2741890A1; BE1010192A3; GB2299088B; EP0705322A4;
CN111690081A; EP1985685A1; US8901050B2; US6906191B2; US8993496B2; EP0744393A1; WO0148055A1; US9150811B2; EP1985686A1;
EP1078977A1; US8716202B2

Designated contracting state (EPC)

BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0460309 A1 19911211; EP 0460309 B1 19950823; EP 0460309 B2 20000705; AU 645809 B2 19940127; AU 7813491 A 19911212;
CA 2043998 A1 19911207; CA 2043998 C 20030812; DE 69021872 D1 19950928; DE 69021872 T2 19960118; DE 69021872 T3 20030213;
JP 2966586 B2 19991025; JP H04227995 A 19920818; ZA 914157 B 19930224

DOCDB simple family (application)

EP 90306128 A 19900606; AU 7813491 A 19910603; CA 2043998 A 19910606; DE 69021872 T 19900606; JP 15991991 A 19910605;
ZA 914157 A 19910530