

Publication

EP 0786448 A3 19970813

Application

EP 97102055 A 19950314

Priority

- EP 95913194 A 19950314
- FR 9403138 A 19940317

Abstract (en)

[origin: EP0786448A2] New detergent-dispersant additives are obtd. by (A) neutralisation of alkylphenols contg. 35 - 85% (wt.) of linear 12-40 (pref. 18-30)C alkylphenols mixed with 15-65% (wt.) of branched-chain 9-24 (pref. 12) C alkyl phenols, with an alkaline earth base in the presence of 1-4C carboxylic acids, the operation being effected at at least 215 deg. C, with gradual application of vacuum to eliminate water of reaction in the absence of any solvent to form an azeotrope; (B) carboxylation of the alkyl phenate obtd. in (A) to transform at least 22% (pref. 25%) (moles) of the initial alkyl phenols to alkyl salicylates - using CO₂ gas at 180-240 pref. 190-220) deg. C at atmos. pressure to 15x10^{<5>} Pa (15 bars) for 1-8 hrs. - opt. in the presence of a dilution oil 100 N at the beginning or end of steps (A) or (B); (C) sulphurisation and over-basing of the mixt. of alkyl-phenates and -salicylates obtd. with elementary S in the presence of an alkaline earth base - a mono-alcohol of B, Pr, greater than 150 deg. C (pref. more than 175) and possibly an alkylene glycol (or alkyl ether deriv.) at 145-180 (pref. 150-160) deg. C.; (D) elimination of alkylene-glycol and mono-alcohol by distn.; (E) filtration to eliminate sediment; and (F) degassing to air at 80-160 (pref. 110-14) deg. C, until a grading of 1A on a copper strip (according to the ASTM D130 test) effected for 1 hr at 150 deg. C) was obtd.

IPC 1-7

C07C 65/10; **C10M 159/22**; **C07G 17/00**

IPC 8 full level

C10M 159/22 (2006.01); **C10N 30/04** (2006.01); **C10N 40/08** (2006.01)

CPC (source: EP US)

C10M 159/22 (2013.01 - EP US)

Citation (search report)

- [DX] FR 2625220 A1 19890630 - OROGIL [FR]
- [X] EP 0248465 A1 19871209 - SHELL INT RESEARCH [NL]
- [X] GB 759344 A 19561017 - BATAAFSCHE PETROLEUM

Cited by

EP1236791A1; WO2012070007A1; US6642190B2; US7960319B2

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0786448 A2 19970730; **EP 0786448 A3 19970813**; **EP 0786448 B1 20030521**; CA 2181137 A1 19950921; DE 69504479 D1 19981008; DE 69504479 T2 19990128; DE 69530852 D1 20030626; DE 69530852 T2 20040506; EP 0750659 A1 19970102; EP 0750659 B1 19980902; FR 2717491 A1 19950922; FR 2717491 B1 19960607; JP H09512287 A 19971209; US 5808145 A 19980915; WO 9525155 A1 19950921

DOCDB simple family (application)

EP 97102055 A 19950314; CA 2181137 A 19950314; DE 69504479 T 19950314; DE 69530852 T 19950314; EP 95913194 A 19950314; FR 9403138 A 19940317; FR 9500299 W 19950314; JP 52388195 A 19950314; US 70453096 A 19961125