

Title (en)

ADDITIVES AND FUEL COMPOSITIONS.

Title (de)

ADDITIVE FÜR ÖLE UND ZUSAMMENSETZUNGEN.

Title (fr)

COMPOSITIONS DE MAZOUT ET ADDITIFS.

Publication

EP 0648256 A1 19950419 (EN)

Application

EP 93915736 A 19930629

Priority

- EP 9301669 W 19930629
- GB 9213854 A 19920630

Abstract (en)

[origin: WO9400535A1] An additive for improving the cold flow properties of crude oil, lubricating oil or fuel oil comprises one or more oil-soluble copolymers of ethylene and an unsaturated monomer of general formula (I), wherein R6 is hydrogen or methyl, R5 is a -OCOR8 group wherein R8 is a hydrogen formate or a C1 to C28, more usually C1 to C17, and preferably a C1 to C8, straight or branched chain alkyl group, or R5 is a -COOR8 group wherein R8 is as defined above but is not hydrogen, and R7 is hydrogen or -COOR8 as defined above, and wherein (i) where there is more than one copolymer, the arithmetic mean of the content of said unsaturated monomer in the copolymers is below 11 mole %, or (ii) where there is one copolymer, the content of said unsaturated monomer in the copolymer is in the range of 6.5 to 10 mole %.

IPC 1-7

C10L 1/14; C10M 145/02

IPC 8 full level

C10L 1/192 (2006.01); **C08F 22/10** (2006.01); **C08F 222/16** (2006.01); **C10L 1/14** (2006.01); **C10L 1/195** (2006.01); **C10L 1/196** (2006.01);
C10L 1/197 (2006.01); **C10L 10/08** (2006.01); **C10L 10/14** (2006.01); **C10M 145/00** (2006.01); **C10M 145/02** (2006.01); **C10M 145/06** (2006.01);
C10M 145/08 (2006.01); **C10M 145/12** (2006.01); **C10M 157/00** (2006.01); **C10M 161/00** (2006.01); **C10L 1/16** (2006.01); **C10L 1/18** (2006.01);
C10L 1/22 (2006.01); **C10L 1/24** (2006.01); **C10N 30/02** (2006.01)

CPC (source: EP KR)

C10L 1/14 (2013.01 - KR); **C10L 1/143** (2013.01 - EP); **C10L 1/1963** (2013.01 - EP); **C10L 1/1966** (2013.01 - EP); **C10L 1/1973** (2013.01 - EP);
C10M 133/06 (2013.01 - EP); **C10M 133/16** (2013.01 - EP); **C10M 135/08** (2013.01 - EP); **C10M 135/10** (2013.01 - EP);
C10M 143/02 (2013.01 - EP); **C10M 143/04** (2013.01 - EP); **C10M 145/02** (2013.01 - KR); **C10M 145/08** (2013.01 - EP);
C10M 145/12 (2013.01 - EP); **C10M 145/16** (2013.01 - EP); **C10M 145/36** (2013.01 - EP); **C10M 145/38** (2013.01 - EP);
C10M 157/00 (2013.01 - EP); **C10M 161/00** (2013.01 - EP); **C10L 1/1616** (2013.01 - EP); **C10L 1/1641** (2013.01 - EP); **C10L 1/165** (2013.01 - EP);
C10L 1/1658 (2013.01 - EP); **C10L 1/188** (2013.01 - EP); **C10L 1/1881** (2013.01 - EP); **C10L 1/1883** (2013.01 - EP); **C10L 1/189** (2013.01 - EP);
C10L 1/1895 (2013.01 - EP); **C10L 1/1955** (2013.01 - EP); **C10L 1/1985** (2013.01 - EP); **C10L 1/221** (2013.01 - EP); **C10L 1/2222** (2013.01 - EP);
C10L 1/2225 (2013.01 - EP); **C10L 1/223** (2013.01 - EP); **C10L 1/2235** (2013.01 - EP); **C10L 1/224** (2013.01 - EP); **C10L 1/232** (2013.01 - EP);
C10L 1/2364 (2013.01 - EP); **C10L 1/2366** (2013.01 - EP); **C10L 1/2368** (2013.01 - EP); **C10L 1/238** (2013.01 - EP); **C10L 1/2383** (2013.01 - EP);
C10L 1/2387 (2013.01 - EP); **C10L 1/2412** (2013.01 - EP); **C10L 1/2437** (2013.01 - EP); **C10L 1/245** (2013.01 - EP); **C10L 1/2475** (2013.01 - EP);
C10M 2205/00 (2013.01 - EP); **C10M 2205/022** (2013.01 - EP); **C10M 2205/024** (2013.01 - EP); **C10M 2205/04** (2013.01 - EP);
C10M 2207/10 (2013.01 - EP); **C10M 2207/128** (2013.01 - EP); **C10M 2207/24** (2013.01 - EP); **C10M 2209/062** (2013.01 - EP);
C10M 2209/082 (2013.01 - EP); **C10M 2209/086** (2013.01 - EP); **C10M 2209/103** (2013.01 - EP); **C10M 2209/104** (2013.01 - EP);
C10M 2209/105 (2013.01 - EP); **C10M 2209/106** (2013.01 - EP); **C10M 2209/107** (2013.01 - EP); **C10M 2209/108** (2013.01 - EP);
C10M 2209/109 (2013.01 - EP); **C10M 2215/04** (2013.01 - EP); **C10M 2215/08** (2013.01 - EP); **C10M 2215/082** (2013.01 - EP);
C10M 2215/086 (2013.01 - EP); **C10M 2215/12** (2013.01 - EP); **C10M 2215/122** (2013.01 - EP); **C10M 2215/22** (2013.01 - EP);
C10M 2215/221 (2013.01 - EP); **C10M 2215/223** (2013.01 - EP); **C10M 2215/225** (2013.01 - EP); **C10M 2215/226** (2013.01 - EP);
C10M 2215/26 (2013.01 - EP); **C10M 2215/28** (2013.01 - EP); **C10M 2215/30** (2013.01 - EP); **C10M 2217/024** (2013.01 - EP);
C10M 2217/06 (2013.01 - EP); **C10M 2219/04** (2013.01 - EP); **C10M 2219/042** (2013.01 - EP); **C10M 2219/044** (2013.01 - EP);
C10M 2219/10 (2013.01 - EP); **C10M 2219/102** (2013.01 - EP); **C10M 2219/104** (2013.01 - EP); **C10M 2219/106** (2013.01 - EP);
C10M 2223/045 (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2020/01** (2020.05 - EP); **C10N 2070/02** (2020.05 - EP)

Citation (search report)

See references of WO 9400535A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9400535 A1 19940106; AU 4561393 A 19940124; CA 2137230 A1 19940106; CN 1083857 A 19940316; EP 0648256 A1 19950419;
GB 9213854 D0 19920812; JP H07508778 A 19950928; KR 950702234 A 19950619; RU 2107088 C1 19980320; RU 95107702 A 19970110;
TR 28208 A 19960216

DOCDB simple family (application)

EP 9301669 W 19930629; AU 4561393 A 19930629; CA 2137230 A 19930629; CN 93116244 A 19930629; EP 93915736 A 19930629;
GB 9213854 A 19920630; JP 50206294 A 19930629; KR 19940704859 A 19941230; RU 95107702 A 19930629; TR 47293 A 19930630