

Title (en)  
LOW TEMPERATURE OPERABILITY ADDITIVE COMPOSITIONS OF AVERAGE DISTILLATES

Title (de)  
ADDITIVZUSAMMENSETZUNG ZUR VERBESSERUNG DER KÄLTEFLIESS- EIGENSCHAFTEN VON MITTELDESTILLATE

Title (fr)  
COMPOSITION D'ADDITIFS D'OPERABILITE A FROID DES DISTILLATS MOYENS

Publication  
**EP 0722481 B1 19980610 (FR)**

Application  
**EP 94928929 A 19940929**

Priority  
• FR 9401138 W 19940929  
• FR 9311664 A 19930930

Abstract (en)  
[origin: US5725610A] PCT No. PCT/FR94/01138 Sec. 371 Date Aug. 13, 1996 Sec. 102(e) Date Aug. 13, 1996 PCT Filed Sep. 29, 1994 PCT Pub. No. WO95/09220 PCT Pub. Date Apr. 6, 1995 Additive composition enhancing the low temperature operability of average distillates beyond -20 DEG C. comprising at least 40% by weight of a composition consisting of: i) from 60 to 94% by weight of an antisedimentation additive resulting from the reaction of at least one aliphatic dicarboxylic compound and one polyamine of general formula (II) wherein R is a saturated aliphatic radical comprising from 1 to 32 carbon atoms, n is 2-4 and m is 1-4; and ii) 6-40 % by weight of a dispersing-stabilizing additive having a molecular weight varying from 15000 to 50000 resulting from the esterification reaction of a linear alcohol having from 6 to 24 atoms with an organic acid such as maleic acid and its halides, the ester obtained being polymerized with itself or a copolymerizing compound selected from aliphatic dicarboxylic compounds.

IPC 1-7  
**C10L 1/14**

IPC 8 full level  
**C10L 1/18** (2006.01); **C08L 33/04** (2006.01); **C08L 33/08** (2006.01); **C08L 35/02** (2006.01); **C08L 77/00** (2006.01); **C08L 77/06** (2006.01); **C10L 1/14** (2006.01); **C10L 1/188** (2006.01); **C10L 1/19** (2006.01); **C10L 1/196** (2006.01); **C10L 1/234** (2006.01); **C10L 1/2383** (2006.01); **C10L 10/14** (2006.01); **C10L 10/18** (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP KR US)  
**C10L 1/14** (2013.01 - KR); **C10L 1/143** (2013.01 - EP US); **C10L 1/1963** (2013.01 - EP US); **C10L 1/1966** (2013.01 - EP US); **C10L 1/2222** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE CH DE DK FR GB IE LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9509220 A1 19950406**; AT E167228 T1 19980615; CA 2172985 A1 19950406; CN 1044915 C 19990901; CN 1132523 A 19961002; CZ 293805 B6 20040818; CZ 91896 A3 19961016; DE 69411027 D1 19980716; DE 69411027 T2 19990211; DK 0722481 T3 19990322; EP 0722481 A1 19960724; EP 0722481 B1 19980610; FI 119550 B 20081231; FI 961425 A0 19960329; FI 961425 A 19960329; FR 2710652 A1 19950407; FR 2710652 B1 19951201; HU 220708 B1 20020429; HU 9600829 D0 19960528; HU T75503 A 19970528; JP H09503015 A 19970325; KR 100298237 B1 20011024; KR 960705004 A 19961009; NO 314089 B1 20030127; NO 961295 D0 19960329; NO 961295 L 19960329; PL 179141 B1 20000731; PL 313714 A1 19960722; RU 2128210 C1 19990327; UA 48117 C2 20020815; US 5725610 A 19980310

DOCDB simple family (application)  
**FR 9401138 W 19940929**; AT 94928929 T 19940929; CA 2172985 A 19940929; CN 94193586 A 19940929; CZ 91896 A 19940929; DE 69411027 T 19940929; DK 94928929 T 19940929; EP 94928929 A 19940929; FI 961425 A 19960329; FR 9311664 A 19930930; HU 9600829 A 19940929; JP 51015294 A 19940929; KR 19960701619 A 19960328; NO 961295 A 19960329; PL 31371494 A 19940929; RU 96110200 A 19940929; UA 96031111 A 19940929; US 61283996 A 19960813