

Title (en)  
LOW-SULPHUR MINERAL OIL DISTILLATES WITH IMPROVED COLD PROPERTIES, CONTAINING AN ESTER OF AN ALKOXYLATED POLYOL AND A COPOLYMER OF ETHYLENE AND UNSATURATED ESTERS

Title (de)  
SCHWEFELARME MINERALOLDESTILLATE MIT VERBESSERTEN KÄLTEEIGENSCHAFTEN, UMFASSEND EINEN ESTER EINES ALKOXYLIERTEN POLYOLS UND EIN COPOLYMER AUS ETHYLEN UND UNGESÄTTIGTEN ESTERN

Title (fr)  
DISTILLATS D'HUILE MINERALE A BASSE TENEUR EN SOUFRE A PROPRIETES A FROID AMELIOREES, CONTENANT UN ESTER D'UN POLYOL ALCOXYLE ET UN COPOLYMER D'ETHYLENE ET D'ESTERS INSATURES

Publication  
**EP 1458837 B1 20060913 (DE)**

Application  
**EP 02791659 A 20021102**

Priority  
• DE 10155748 A 20011114  
• EP 0212233 W 20021102

Abstract (en)  
[origin: WO03042337A2] The invention relates to middle distillates having a maximal sulphur content of 0.05 wt. %, which contain fatty acid esters of alkoxyated polyols with at least 3 OH groups (A) and at least one cold-fluidity improving additive (B), whereby said cold-fluidity improving additive contains at least one copolymer of ethylene and one or several ethylenically unsaturated carboxylic acid esters, said copolymer having an ethylene portion of 60 to 90 mole %.

IPC 8 full level  
**C10L 1/18** (2006.01); **C10L 1/14** (2006.01); **C10L 1/183** (2006.01); **C10L 1/19** (2006.01); **C10L 1/192** (2006.01); **C10L 1/197** (2006.01); **C10L 10/14** (2006.01); **C10M 157/00** (2006.01); **C10M 161/00** (2006.01); **C10L 1/16** (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP KR US)  
**C10L 1/143** (2013.01 - EP KR US); **C10L 1/1616** (2013.01 - KR); **C10L 1/191** (2013.01 - KR); **C10L 1/1966** (2013.01 - KR); **C10L 1/1973** (2013.01 - KR); **C10L 1/1981** (2013.01 - KR); **C10L 1/1983** (2013.01 - KR); **C10L 1/1985** (2013.01 - KR); **C10L 1/1986** (2013.01 - KR); **C10L 1/2222** (2013.01 - KR); **C10M 101/00** (2013.01 - KR); **C10L 1/1616** (2013.01 - EP US); **C10L 1/191** (2013.01 - EP US); **C10L 1/1966** (2013.01 - EP US); **C10L 1/1973** (2013.01 - EP US); **C10L 1/1981** (2013.01 - EP US); **C10L 1/1983** (2013.01 - EP US); **C10L 1/1985** (2013.01 - EP US); **C10L 1/1986** (2013.01 - EP US); **C10L 1/221** (2013.01 - EP US); **C10L 1/2222** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US); **C10L 1/2364** (2013.01 - EP US)

Designated contracting state (EPC)  
BE DE ES FI FR GB IT NL SE

DOCDB simple family (publication)  
**WO 03042337 A2 20030522; WO 03042337 A3 20040219**; DE 10155748 A1 20030528; DE 10155748 B4 20090423; DE 50208168 D1 20061026; EP 1458837 A2 20040922; EP 1458837 B1 20060913; ES 2272801 T3 20070501; JP 2005509085 A 20050407; KR 20050042254 A 20050506; US 2004255511 A1 20041223; US 7347881 B2 20080325

DOCDB simple family (application)  
**EP 0212233 W 20021102**; DE 10155748 A 20011114; DE 50208168 T 20021102; EP 02791659 A 20021102; ES 02791659 T 20021102; JP 2003544157 A 20021102; KR 20047007331 A 20040513; US 49555804 A 20040512