

Title (en)  
Additive containing multigrade lubricating oil and engine oil composition

Title (de)  
Zusatzstoffhaltige Mehrbereichsmotoröl- und -schmierölkomposition

Title (fr)  
Composition d'huile lubrifiante et huile de moteur multigrade contenant des additifs

Publication  
**EP 0789069 B1 20070620 (DE)**

Application  
**EP 95119299 A 19951207**

Priority  
HU 9502797 A 19950925

Abstract (en)  
[origin: EP0789069A2] Multifunctional engine oil composition consists of a base oil and an additive package (1.5-55 weight %) comprises: (A) 10-100 wt.% polyfunctional, ash-free detergent-dispersant additive or its oily solution comprising polymer components which are produced by reacting a polyolefin derivative, preferably a PIB derivative, injected with dicarboxylic acid (anhydride) and non-acidic comonomers with ethylenic double bond, and having an average molecular weight of 800, with compound containing amino, imino or hydroxyl groups, the polyolefin chain in the polymer component carrying 1.6-20 acid derivatives, the amount of the molecules with more than one acid derivative being at least 25 wt.%, and the derivative being an imide, amide or ester amide derivative, and 0-90 wt.% usual alkenyl succinic acid derivative; (B) usual dispersant-detergent with different base number and metal content, antioxidant, friction reducer, wear inhibitor, corrosion inhibitor, defoamer and flow point reducer; and (C) usual viscosity (index) improving polymer. Weight ratio of A:B:C is 15-85: 15-85: 0-70.

IPC 8 full level  
**C10M 133/56** (2006.01); **C10M 167/00** (2006.01); **C10L 1/18** (2006.01); **C10M 101/00** (2006.01); **C10M 133/12** (2006.01); **C10M 137/10** (2006.01); **C10M 143/06** (2006.01); **C10M 143/10** (2006.01); **C10M 143/12** (2006.01); **C10M 145/14** (2006.01); **C10M 149/06** (2006.01); **C10M 157/00** (2006.01); **C10M 157/04** (2006.01); **C10M 159/20** (2006.01); **C10N 30/04** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP)  
**C10M 129/10** (2013.01); **C10M 129/40** (2013.01); **C10M 129/42** (2013.01); **C10M 129/95** (2013.01); **C10M 133/12** (2013.01); **C10M 133/44** (2013.01); **C10M 133/56** (2013.01); **C10M 135/06** (2013.01); **C10M 135/18** (2013.01); **C10M 135/32** (2013.01); **C10M 137/10** (2013.01); **C10M 143/00** (2013.01); **C10M 143/02** (2013.01); **C10M 143/04** (2013.01); **C10M 143/12** (2013.01); **C10M 145/08** (2013.01); **C10M 145/14** (2013.01); **C10M 149/06** (2013.01); **C10M 159/22** (2013.01); **C10M 159/24** (2013.01); **C10M 167/00** (2013.01); **C10M 2205/00** (2013.01); **C10M 2205/02** (2013.01); **C10M 2205/022** (2013.01); **C10M 2205/024** (2013.01); **C10M 2205/06** (2013.01); **C10M 2207/023** (2013.01); **C10M 2207/026** (2013.01); **C10M 2207/027** (2013.01); **C10M 2207/028** (2013.01); **C10M 2207/121** (2013.01); **C10M 2207/122** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/125** (2013.01); **C10M 2207/126** (2013.01); **C10M 2207/127** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/262** (2013.01); **C10M 2207/28** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/288** (2013.01); **C10M 2207/34** (2013.01); **C10M 2209/04** (2013.01); **C10M 2209/06** (2013.01); **C10M 2209/062** (2013.01); **C10M 2209/084** (2013.01); **C10M 2209/086** (2013.01); **C10M 2215/04** (2013.01); **C10M 2215/06** (2013.01); **C10M 2215/064** (2013.01); **C10M 2215/065** (2013.01); **C10M 2215/066** (2013.01); **C10M 2215/067** (2013.01); **C10M 2215/068** (2013.01); **C10M 2215/08** (2013.01); **C10M 2215/082** (2013.01); **C10M 2215/086** (2013.01); **C10M 2215/12** (2013.01); **C10M 2215/22** (2013.01); **C10M 2215/221** (2013.01); **C10M 2215/223** (2013.01); **C10M 2215/225** (2013.01); **C10M 2215/226** (2013.01); **C10M 2215/26** (2013.01); **C10M 2215/28** (2013.01); **C10M 2215/30** (2013.01); **C10M 2217/024** (2013.01); **C10M 2217/028** (2013.01); **C10M 2217/046** (2013.01); **C10M 2217/06** (2013.01); **C10M 2219/024** (2013.01); **C10M 2219/046** (2013.01); **C10M 2219/066** (2013.01); **C10M 2219/068** (2013.01); **C10M 2219/082** (2013.01); **C10M 2219/089** (2013.01); **C10M 2219/09** (2013.01); **C10M 2219/10** (2013.01); **C10M 2219/102** (2013.01); **C10M 2219/104** (2013.01); **C10M 2219/106** (2013.01); **C10M 2223/04** (2013.01); **C10M 2223/042** (2013.01); **C10M 2223/045** (2013.01); **C10M 2223/047** (2013.01); **C10N 2010/04** (2013.01); **C10N 2040/02** (2013.01); **C10N 2040/08** (2013.01); **C10N 2040/20** (2013.01); **C10N 2040/22** (2013.01); **C10N 2040/25** (2013.01); **C10N 2040/251** (2020.05); **C10N 2040/255** (2020.05); **C10N 2040/28** (2013.01)

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

Designated extension state (EPC)  
LT LV SI

DOCDB simple family (publication)  
**EP 0789069 A2 19970813**; **EP 0789069 A3 19980513**; **EP 0789069 B1 20070620**; AT E365202 T1 20070715; CZ 294327 B6 20041110; CZ 341095 A3 19980415; DE 59511080 D1 20070802; EE 9500079 A 19970415; ES 2289741 T3 20080201; HR P950611 A2 19980228; HR P950611 B1 20080831; HU 213255 B 19970528; HU 9502797 D0 19951128; PL 179150 B1 20000731; PL 312098 A1 19970401; RO 119233 B1 20040630; RS 49806 B 20080807; RU 2161179 C2 20001227; SK 162995 A3 19970709; SK 284909 B6 20060202; UA 43339 C2 20011217; YU 80395 A 19980710

DOCDB simple family (application)  
**EP 95119299 A 19951207**; AT 95119299 T 19951207; CZ 341095 A 19951220; DE 59511080 T 19951207; EE 9500079 A 19951229; ES 95119299 T 19951207; HR P950611 A 19951221; HU 9502797 A 19950925; PL 31209895 A 19951229; RO 9502313 A 19951229; RU 95122599 A 19951228; SK 162995 A 19951221; UA 95125473 A 19951225; YU 80395 A 19951226