

Title (en)

Improved lubricant compositions for low-temperature internal combustion engines.

Title (de)

Schmiermittelzusammensetzungen für bei niedriger Temperatur arbeitende Verbrennungsmaschine.

Title (fr)

Compositions lubrifiantes pour moteurs à combustion interne à basse température.

Publication

**EP 0317348 A1 19890524 (EN)**

Application

**EP 88310931 A 19881118**

Priority

US 12353187 A 19871120

Abstract (en)

In accordance with the present invention, there are provided lubricating oil compositions which comprise an oil of lubricating viscosity as the major component and as the minor component (A) a mixture of (1) at least one calcium overbased sulfonate or phenate detergent inhibitor, and (2) at least one magnesium overbased sulfonate or phenate detergent inhibitor, and (B) a mixture of (1) at least one zinc di-(primary hydrocarbyl) dithiophosphate and (2) at least one zinc di-(secondary hydrocarbyl) dithiophosphate, wherein the mixed calcium and magnesium detergent inhibitors and the mixed zinc di(primary hydrocarbyl) dithiophosphate and the zinc di(secondary hydrocarbyl) dithiophosphate antiwear agents are present in controlled ratios.

IPC 1-7

**C10M 163/00**; **C10N 40/00**

IPC 8 full level

**C10M 163/00** (2006.01); **C10N 10/04** (2006.01); **C10N 30/04** (2006.01); **C10N 30/06** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR US)

**C10M 137/10** (2013.01 - EP); **C10M 159/22** (2013.01 - EP); **C10M 159/24** (2013.01 - EP); **C10M 163/00** (2013.01 - EP KR US); **C10M 2205/00** (2013.01 - EP); **C10M 2205/22** (2013.01 - EP); **C10M 2207/022** (2013.01 - EP); **C10M 2207/023** (2013.01 - EP); **C10M 2207/027** (2013.01 - EP); **C10M 2207/028** (2013.01 - EP); **C10M 2207/09** (2013.01 - EP); **C10M 2207/123** (2013.01 - EP); **C10M 2207/125** (2013.01 - EP); **C10M 2207/129** (2013.01 - EP); **C10M 2207/16** (2013.01 - EP); **C10M 2207/22** (2013.01 - EP); **C10M 2207/262** (2013.01 - EP); **C10M 2207/289** (2013.01 - EP); **C10M 2209/084** (2013.01 - EP); **C10M 2209/086** (2013.01 - EP); **C10M 2209/101** (2013.01 - EP); **C10M 2209/104** (2013.01 - EP); **C10M 2209/107** (2013.01 - EP); **C10M 2215/04** (2013.01 - EP); **C10M 2215/042** (2013.01 - EP); **C10M 2215/064** (2013.01 - EP); **C10M 2215/065** (2013.01 - EP); **C10M 2215/08** (2013.01 - EP); **C10M 2215/082** (2013.01 - EP); **C10M 2215/12** (2013.01 - EP); **C10M 2215/22** (2013.01 - EP); **C10M 2215/221** (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 2217/028** (2013.01 - EP); **C10M 2217/042** (2013.01 - EP); **C10M 2217/043** (2013.01 - EP); **C10M 2217/046** (2013.01 - EP); **C10M 2217/06** (2013.01 - EP); **C10M 2219/022** (2013.01 - EP); **C10M 2219/044** (2013.01 - EP); **C10M 2219/046** (2013.01 - EP); **C10M 2219/068** (2013.01 - EP); **C10M 2219/084** (2013.01 - EP); **C10M 2219/087** (2013.01 - EP); **C10M 2219/088** (2013.01 - EP); **C10M 2219/089** (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 2223/04** (2013.01 - EP); **C10M 2223/042** (2013.01 - EP); **C10M 2223/045** (2013.01 - EP); **C10M 2223/12** (2013.01 - EP); **C10M 2225/04** (2013.01 - EP); **C10M 2227/061** (2013.01 - EP); **C10M 2227/09** (2013.01 - EP); **C10M 2229/041** (2013.01 - EP); **C10N 2010/00** (2013.01 - EP); **C10N 2010/02** (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2010/08** (2013.01 - EP); **C10N 2010/14** (2013.01 - EP KR US); **C10N 2010/16** (2013.01 - EP KR US); **C10N 2040/04** (2013.01 - EP); **C10N 2040/042** (2020.05 - EP); **C10N 2040/044** (2020.05 - EP); **C10N 2040/046** (2020.05 - EP); **C10N 2040/08** (2013.01 - EP); **C10N 2040/25** (2013.01 - EP); **C10N 2040/251** (2020.05 - EP); **C10N 2040/255** (2020.05 - EP); **C10N 2040/28** (2013.01 - EP); **C10N 2070/02** (2020.05 - EP)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0317348 A1 19890524**; AU 2569288 A 19890525; AU 617712 B2 19911205; BR 8806068 A 19890808; CA 1337293 C 19951010; CN 1021344 C 19930623; CN 1034753 A 19890816; JP H01201399 A 19890814; KR 890008308 A 19890710; KR 960013615 B1 19961009

DOCDB simple family (application)

**EP 88310931 A 19881118**; AU 2569288 A 19881118; BR 8806068 A 19881118; CA 583255 A 19881116; CN 88107967 A 19881119; JP 29487288 A 19881121; KR 880015268 A 19881119