

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

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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

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IPC 8 full level

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Citation (search report)

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