

Title (en)
LUBRICATING OIL COMPOSITIONS WITH IMPROVED FRICTION PROPERTIES

Title (de)
SCHMIERÖLZUSAMMENSETZUNGEN MIT VERBESSERTEN REIBUNGSEIGENSCHAFTEN

Title (fr)
COMPOSITIONS D'HUILE LUBRIFIANTES AUX PROPRIETES DE FROTTEMENT AMELIOREES

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Abstract (en)
[origin: US2003171223A1] The present invention concerns friction reducers for use in lubricating oil compositions which comprise certain groups of aromatic compounds, esters, narrow mixtures of base stocks, and/or amorphous polymers such as amorphous olefin copolymers. These compositions can provide substantial reductions in the coefficient of friction and fuel economy improving benefits when admixed to lubricating oils without deleterious effects such as instability, undesirable high viscosities and deposits. In one aspect of the invention, pentaerythritol esters and optionally triol esters are added to lubricating oil compositions to provide reduced friction and improved fuel economy. In a second aspect of the invention, similar results are obtained by adding hydrocarbyl aromatics to a lubricating oil composition containing one or more of Groups II and III base stock. In a third aspect, the invention concerns a lubricating oil composition comprising an amorphous olefin copolymer and one or more of Groups II and III base stocks. In one embodiment, the third aspect also includes one or more of hydrocarbyl aromatics and polyol esters as part of the composition. In a forth aspect, moderate concentrations of hydrocarbyl aromatics are used in a lubricating oil composition comprising paraffinic base oil stocks and preferably a borated polyisobutenyl succinimide ashless dispersant.

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