

Title (en)
Lubricating oil compositions.

Title (de)
Schmierstoffzusammensetzungen.

Title (fr)
Compositions lubrifiantes.

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Application
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Priority
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Abstract (en)
A composition containing A) a lubricant and a mixture of B) for example, at least one of the compounds O,O-bis-2-ethylhexyl sodium dithiophosphate, O,O-bis-2-ethylhexyl sodium thionophosphate, O,O-bis-2-methyl-propyl sodium dithiophosphate, O,O-bis-nonylphenyl sodium dithiophosphate or S-[O,O-bis-2-ethylhexylthiophosphoryl] potassium thioglycolate, C) at least one compound from the group comprising the aromatic amines, for example the diphenylamines or phenothiazines, and D) at least one compound from the group comprising the cyclic sterically hindered amines, the acyclic sterically hindered amines and the phenols of the formula <IMAGE> where R<4> and R<5> and A are, for example, alkyl radicals, shows high stability to oxidative degradation.

Abstract (de)
Zusammensetzung enthaltend A) einen Schmierstoff und ein Gemisch aus, B) beispielsweise wenigstens eine der Verbindungen O,O-Bis-2-ethylhexyl-natriumdithiophosphat, O,O-Bis-2-ethylhexyl-natriumthionophosphat, O,O-Bis-2-methyl-propyl-natriumdithiophosphat, O,O-Bis-nonylphenyl-natriumdithiophosphat oder S-[O,O-Bis-2-ethylhexylthiophosphoryl]-kaliumthioglykolat, C) wenigstens eine Verbindung aus der Reihe der aromatischen Amine, beispielsweise der Diphenylamine oder Phenothiazine und D) wenigstens eine Verbindung aus der Reihe der cyclischen sterisch gehinderten Amine, der nicht-cyclischen sterisch gehinderten Amine und der Phenole der Formel <IMAGE> wobei R<4>, R<5> und A beispielsweise Alkylreste bedeuten. Derartige Schmierstoffzusammensetzungen weisen eine hohe Stabilität gegen oxidativen Abbau auf.

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• [X] EP 0267875 A2 19880518 - CIBA GEIGY AG [CH]
• [AP] EP 0356677 A1 19900307 - CIBA GEIGY AG [CH]
• [A] EP 0059168 A1 19820901 - CIBA GEIGY AG [CH]
• [AD] DE 2364121 A1 19740711 - CIBA GEIGY AG
• [AP] EP 0346283 A2 19891213 - CIBA GEIGY AG [CH]

Cited by
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