

Title (en)

IMPROVED MULTIFUNCTIONAL VISCOSITY INDEX MODIFIER ADDITIVES DERIVED FROM AMIDO AMINES

Publication

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Application

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Priority

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Abstract (en)

[origin: EP0400874A1] The present invention is directed to a composition of matter useful as a multifunctional viscosity improver-dispersant for oleaginous compositions, particularly lubricating oil compositions, comprising at least one adduct or reaction product of (A) ethylene copolymer, preferably ethylene propylene copolymer of at least 15,000 number average molecular weight grafted with monounsaturated mono- or dicarboxylic acid material; and (B) amido-amine or thioamido-amine comprising reaction product of at least one amine, preferably polyamine, and an alpha, beta-unsaturated compound represented by the formula <CHEM> wherein X is sulfur or oxygen, Y is -OR<4>, -SR<4>, or <CHEM> and R<1>, R<2>, R<3>, R<4> and R<5> are independently selected from hydrogen, hydrocarbyl, and substituted hydrocarbyl. The present invention is also directed to oleaginous compositions and concentrates, particularly lubricating oil compositions and concentrates, containing said nitrogen containing carboxylic acid material grafted high molecular weight ethylene copolymer adduct.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Cited by

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