

Title (en)

Cold flow improver for fuel oils of vegetable or animal origin.

Title (de)

Kaltfliessverbesserer für Brennstofföle pflanzlichen oder tierischen Ursprungs

Title (fr)

Agent d'amélioration de l'écoulement à froid pour huiles combustibles d'origine animale ou végétale.

Publication

EP 1380635 B1 20130123 (DE)

Application

EP 03013091 A 20030611

Priority

DE 10230771 A 20020709

Abstract (en)

[origin: US2004010072A1] The present invention provides an additive comprising A) a copolymer of ethylene and 8-21 mol % of at least one acrylic or vinyl ester having a C1-C18-alkyl radical and B) a comb polymer of at least one C8-C16-alkyl ester of an ethylenically unsaturated dicarboxylic acid and at least one C10-C20-olefin, wherein the sum $Q = \sum_{i=1}^{n_1} w_i + \sum_{j=1}^{n_2} w_j$ of the averages by weight of the carbon chain distributions in the alkyl side chains of the olefins on the one hand and the fatty alcohols on the other hand is from 23 to 27, where w_1 and w_2 are the weight proportions of the individual chain lengths in the different monomers 1 and 2, and n_1 and n_2 are the side chain lengths, in the case of olefins without the originally olefinically bonded carbon atoms, of the individual species, and the running variables i and j are the individual side chain lengths in the particular monomer groups.

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

EP1541663A1; EP1541664A1; EP1526168A3; EP1857530A1; US2023120367A1; US10941366B2; US11118126B2; WO2019133659A1; EP1526168A2; US9133409B2; US9212332B2; EP1491614B1

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