

Title (en)

Fuel oils comprising middle distillates and oils of vegetable or animal origin with improved cold properties.

Title (de)

Brennstofföle aus Mitteldestillaten und Ölen pflanzlichen oder tierischen Ursprungs mit verbesserten Kälteeigenschaften

Title (fr)

Huiles combustibles comprenant des distillats moyens et des huiles d'origine végétale ou animale et ayant des propriétés à froid améliorées.

Publication

EP 1541662 B1 20150902 (DE)

Application

EP 04028306 A 20041130

Priority

DE 10357880 A 20031211

Abstract (en)

[origin: EP1541662A1] Fuel oil composition comprises a mineral oil, an oil of vegetable or animal origin, and a cold flow improver comprising a copolymer (I) of ethylene and an acrylic or vinyl ester and a comb polymer (II) of an olefin (IIa) with an alkyl group attached to the double bond and an ethylenically unsaturated dicarboxylic acid N-alkyl amide or imide (IIb), where the sum Q of the molar average alkyl chain lengths in (IIa) and (IIb) is 21-28. Fuel oil composition comprises a mineral oil, an oil of vegetable or animal origin, and a cold flow improver comprising a copolymer (I) of ethylene and 8-21 mole% of an acrylic or vinyl ester with a C1-C18 alkyl group and a comb polymer (II) of an olefin (IIa) with a C8-C18 alkyl group attached to the double bond and an ethylenically unsaturated dicarboxylic acid amide or imide (IIb) with a C8-C16 alkyl group attached to the amide or imide group, where the sum Q of the molar average alkyl chain lengths in (IIa) and (IIb) is 21-28.

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

US11566196B2; WO2018108534A1; EP1935967A1; GB2429210A; GB2429210B; CN110088253A; US2021163837A1; WO2010081634A1; WO2011095249A1; WO2005097953A1; US7942941B2; US9663740B2; US10947467B2

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