

Title (en)

Use of copolymers of ethylene and unsaturated carboxylic esters in middle distillates to improve cold flow properties

Title (de)

Verwendung von Copolymeren aus Ethylen und ungesättigten Carbonsäureestern in Mitteldestillaten zur Verbesserung der Kaltfliesseigenschaften

Title (fr)

Utilisation de copolymères d'éthylène et d'esters carboxyliques insaturés dans des distillats moyens pour l'amélioration des propriétés d'écoulement à froid

Publication

EP 0890633 B1 20040317 (DE)

Application

EP 98111799 A 19980626

Priority

DE 19729055 A 19970708

Abstract (en)

[origin: EP0890633A1] Fuel oil contains: (A) a mineral oil having a cloud point of less than -8 degrees C, a boiling point of less than 120 degrees C and a difference between CFPP and PP of less than 10 degrees C; and (B) one or more copolymers contg. bivalent structural units of formula: CH₂CH₂ (1) and one or more bivalent structural units for formula: CH₂CR₁CR₂ (2) (where, R₁ = H or CH₃; R₂ = COOR₃, OR₃ or OCOR₃; and R₃ = 4-30C alkyl); or a unit derived from maleic acid of formula (2a).

IPC 1-7

C10L 1/22; C10L 1/18

IPC 8 full level

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CPC (source: EP)

C10L 1/1955 (2013.01); **C10L 1/1963** (2013.01); **C10L 1/1973** (2013.01); **C10L 1/2364** (2013.01)

Cited by

EP1134275A3; EP1146108A3; US6110238A; EP0931824A3; US6593426B2; US6565616B1

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