

Title (en)

Additives to improve the cold properties of fuel oils

Title (de)

Additive zur verbesserung der Kälteeigenschaften von Brennstoffölen

Title (fr)

Additif destiné à l'amélioration des propriétés à froid d'huiles combustibles

Publication

EP 1881055 A3 20110202 (DE)

Application

EP 07011540 A 20070613

Priority

DE 102006033151 A 20060718

Abstract (en)

[origin: EP1881055A2] Terpolymer (I) of ethylene, at least an ethylenically unsaturated ester and propene, comprises: at least an ethylenically unsaturated ester derived structural units (12-16 mol.%); 1-4 propene derived methyl group per 100 aliphatic carbon atoms; and less than 6.5 chain ending methyl group per 100 methyl group. Independent claims are included for: (1) the preparation of terpolymer comprising reacting a mixture of ethylene, propene and at least a vinyl ester under increased pressure and increased temperature in the presence of a radical forming initiator, and then regulating the molecular weight by the addition of a moderator containing carbonyl group; (2) a composition (II) comprising at least (I) and at least a further different ethylene-copolymer; (3) a flowable additive concentrate with specific solidifying point of -10[deg]C comprising at least (I) (20-40 wt.%) for the improvement of flow characteristics, and at least a solvent (60-80 wt.%); (4) a process to improve the cold flow characteristics of a fuel oil comprising adding a formulation comprising at least 20 wt.% of at least (I), at or below 0[deg]C; and (5) a fuel oil comprising a distillate means and at least (I).

IPC 8 full level

C10L 1/197 (2006.01); **C08L 23/08** (2006.01); **C08L 23/14** (2006.01); **C10L 1/14** (2006.01); **C10L 10/14** (2006.01)

CPC (source: EP KR US)

C10L 1/143 (2013.01 - EP US); **C10L 1/19** (2013.01 - KR); **C10L 1/192** (2013.01 - KR); **C10L 1/1973** (2013.01 - EP US); **C10L 10/14** (2013.01 - EP KR US); **C10L 1/195** (2013.01 - EP US); **C10L 1/1981** (2013.01 - EP US); **C10L 1/1985** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US)

Citation (search report)

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- [A] EP 0190553 A1 19860813 - RUHRCHEMIE AG [DE]
- [A] US 4178951 A 19791218 - SWEENEY WILLIAM M [US]

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WO2022023636A1; FR3113063A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1881055 A2 20080123; **EP 1881055 A3 20110202**; **EP 1881055 B1 20150603**; CA 2593931 A1 20080118; CA 2593931 C 20140218; DE 102006033151 A1 20080131; DE 102006033151 B4 20141120; JP 2008024930 A 20080207; JP 5854549 B2 20160209; KR 101519393 B1 20150515; KR 20080008276 A 20080123; KR 20150039740 A 20150413; US 2008016753 A1 20080124; US 8979951 B2 20150317

DOCDB simple family (application)

EP 07011540 A 20070613; CA 2593931 A 20070717; DE 102006033151 A 20060718; JP 2007185139 A 20070717; KR 20070071692 A 20070718; KR 20150046182 A 20150401; US 87940907 A 20070717