

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 végétale ou animale

Publication

**EP 1526168 B1 20151223 (DE)**

Application

**EP 04024235 A 20041012**

Priority

DE 10349850 A 20031025

Abstract (en)

[origin: EP1526168A2] New additive comprises 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) comprising (meth)acrylate, vinyl ester, vinyl ether, (meth)acrylamide, allyl ether or diketene units with C8-C16 alkyl groups, where the sum of the molar average alkyl chain lengths in (II) is 11-14. An independent claim is also included for a fuel oil composition comprising a fuel oil of animal or vegetable origin and an additive as above.

IPC 8 full level

**C10L 1/14** (2006.01); **C10L 1/192** (2006.01); **C10L 1/02** (2006.01); **C10L 1/10** (2006.01); **C10L 1/18** (2006.01); **C10L 1/195** (2006.01); **C10L 1/196** (2006.01); **C10L 1/197** (2006.01); **C10L 1/22** (2006.01); **C10L 1/224** (2006.01); **C10L 1/234** (2006.01); **C10L 1/236** (2006.01); **C10L 10/14** (2006.01)

CPC (source: EP KR US)

**C10L 1/143** (2013.01 - EP KR US); **C10L 1/146** (2013.01 - EP KR US); **C10L 1/19** (2013.01 - KR); **C10L 1/195** (2013.01 - EP US); **C10L 1/1955** (2013.01 - EP KR US); **C10L 1/1963** (2013.01 - EP KR US); **C10L 1/1966** (2013.01 - KR); **C10L 1/1973** (2013.01 - EP KR US); **C10L 1/221** (2013.01 - KR); **C10L 1/2364** (2013.01 - EP US); **C10L 1/19** (2013.01 - EP US); **C10L 1/1966** (2013.01 - EP US); **C10L 1/221** (2013.01 - EP US); **C10L 1/224** (2013.01 - EP US)

Cited by

EP1881055A3; EP1881054A3; EP1881053A3; KR101412451B1; EP1541663A1; US8968428B2; US8961622B2; US8979951B2; US9133409B2; US9212332B2

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**EP 1526168 A2 20050427**; **EP 1526168 A3 20050511**; **EP 1526168 B1 20151223**; CA 2486040 A1 20050425; CA 2486040 C 20120313; DE 10349850 A1 20050616; DE 10349850 B4 20080619; DE 10349850 C5 20111208; JP 2005133095 A 20050526; JP 5025077 B2 20120912; KR 101075808 B1 20111025; KR 20050039658 A 20050429; PL 1526168 T3 20160630; US 2005108924 A1 20050526; US 7476264 B2 20090113

DOCDB simple family (application)

**EP 04024235 A 20041012**; CA 2486040 A 20041022; DE 10349850 A 20031025; JP 2004308246 A 20041022; KR 20040084893 A 20041022; PL 04024235 T 20041012; US 97266704 A 20041025